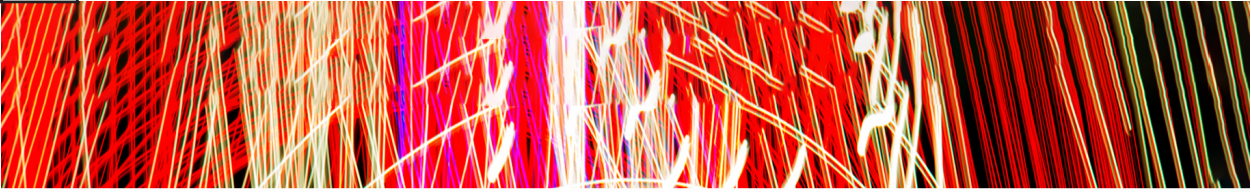

De-constructing the Digital Revolution

Analysis of the Usage of the Term 'Digital Revolution' in Relation with the possibilities of New Technology

GENCO GÜLAN

Genco GULAN

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Analysis of the Usage of the Term "Digital Revolution" in Relation with the New Technology & Social Change Right at the Turn of the Second Millenium

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De-constructing the Digital Revolution:

Analysis of the Usage of the Term in Relation with the New Technology and Social Change right at the Turn of the Second Millenium.

Submitted in partial fullfillment of Master of Art Degree in Media Studies, New School University, New York, NY USA.

GENCO GÜLAN
New York, New York. 2001

Dedicated to
my biolodical family
&
virtual friends.

Abstract:

Today information technology began to offer us new dimensions in the creation, storage and distribution of information however, new media has been presented to society -by the popular press- mainly as a miracle for (direct) marketing. This book explores how a popular term "digital revolution" has been vacuumed, transformed and used to satisfy the rising demands for a new Utopia right at the turn of the second millenium. The author deconstruct the term, and bring examples in an interdisciplinary approach from; visual art, politics, popular culture, history and even bio-technology. Genco Gulan tries to present how an anti-systemic term "revolution" could became systemic. The book, "De-constructing the Digital Revolution" conclude that the developments in "new media" should not only be sought regarding to its material(ist) reflections but also in its power for de-materialization. Hence a possible change(an evolution) rather should be sought within in its own dynamics, through a new digital theory.

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Preface:

For De-constructing the Digital Revolution I started my research studying for the possible effects of Internet on social change. I believed that new communication technologies would provide a genuine opportunity for social progress, that it would challenge the existing political balance both on local and global scales. I relied on my personal experience that I gathered -as an artist- from pioneer online interactive live art events on the World Wide Web. During such a web art event, "Euronimes Gambit/ Chaos in Action"(1) I took part as an artist from Istanbul; Turkey and had the chance to experiment with the possibilities of the Internet, at Boğaziçi University, Networks Research Lab, in terms of information creation and communication. This is where I had the chance to observe the de-materialization process at first hand together with an international group of artists and engineers.

A couple of years later, I had a chance to research these concepts in New York, 'the technological capital of the world' (2) and I was introduced to the term digital revolution. This provocative new term attracted my attention and invited me to search for its meanings. But my first impression was a big disappointment. For a long time, I could not find relevant data, in spite of the number of huge libraries, bookstores, museums and galleries I visited. At first, I thought that this was due to the relative lack of writings on new media technologies but this was not the case. There is, in fact, a huge literature on new media technologies, which often uses the term "digital revolution". But almost none of the books and articles attempted to explore the subject in depth. It took me some time to reach the conclusion that in reality the term "digital revolution" was appearing in popular publications was actually not existing. I was a catch phrase.

Since I could not find relevant references to discuss the term "digital revolution", I decided to deconstruct the term and focus on the individual words, "digital" and "revolution" separately. I hoped that these terms would led me to some useful materials and in-depth discussions. However, my findings than began to conflict with the popular usage of the term in business publications. At this point (3) I recognized

the nature of the contradiction. The concept of the digital technology, transferring information from material into code, challenges the fundamental conditions of consumer society. But popular publications were presenting the new technology as they are promoting the emergence of a new consumer market There was a consensus about the notion of the change in relation to new technology. The different arguments were building up around the speed and the time of this change. Some scholars argued for a tendency for radical change. Esther Dyson, George Gilder, George Keyworth and Alvin Toffler have argued that; "The central event of the 20th century is the overthrow of matter". (3) But the popular magazines tried to pump up consumer fetishism -of gadgets- to reach the stage.

All this does not mean that we can ignore the important changes that information technology had already brought into our lives. I have been doing research for more than ten years and largely drew on paperback texts and sometimes microfilms. For this study, I executed half of my research using digital media and online computer networks. I also used books and popular magazines but I would not have been able to reach the alternative texts without having an Internet connection.
The Internet provides the only space for the existence of alternative ideas. At the turn of the century, the Internet is being more and more colonized but there is still place for self-expression and freedom of speech. The web has unique dynamic live content, which can not be controlled with a single authority at a single location. Yet these liberties are bounded with material conditions, network infrastructure and emerging laws. Whether this temporary autonomous zone can continue to exist with the help of popular participation or not, is the big question.

Genco Gülan, New York, NY. May 2001.

Introduction:

"The Internet Revolution has Legs, but Now Heads Must Roll..." is a provocative slogan from the cover of a Forbes magazine supplement which tells us that currently we are experiencing a revolution, triggered by the Internet. (4) At the same time it warns us of drastic changes that will upset the present status quo. The implied message is that we must be on our guard. The immediacy of these changes is conveyed by the magazine's prominent logotype "ASAP" (As Soon As Possible). The magazine's subtitle "Business Beyond Digital Revolution" introduces a term "digital revolution" specifically in business contexts. Moreover the digital revolution is directly equated with the Internet. Furthermore, the use of the word "beyond" in the subtitle implies that the digital revolution is already under way.

In addition, the extraordinary design on the cover, a guillotine with a blood-dripping blade,(5) brings our attention to another of revolution, the French Revolution. The guillotine as an icon of revolution reminds us of the bloody upheavals during the French Revolution and its associations of radical change in the social structure and overthrow of the ruling classes. The text on the guillotine; "Now Heads Must Roll...", adds further emphasis to the radical nature of revolution in general. (6) Parallel to this "bloody" cover a special section in the Forbes ASAP magazine is devoted to answering the question "Where are We in the Digital Revolution ?". However, in contrast to the references to political and social upheaval on the cover, the text of this section is concerned with business management strategies for changing markets:

> Despite all hoopla of its unprecedented speed and its utter uniqueness, the Internet is 'just another technology revolution', following the same trajectory as those- such as the invention of electricity and the arrival of telegraph, the telephone, and the railroads - that came before it.(7)

This brief example demonstrates a point that I believe can be made more generally about the presentation of the term digital revolution in popular and business publications; I argue that the discrepancy between the striking cover of the Forbes ASAP and the actual content of the special section devoted to the 'digital revolution' serves not to signify the occurrence of a digital revolution but rather the peak point of the commodification of a term and its de-contextualized usage in popular publications.

a) Searching for the Meaning of the Term "Digital Revolution"

Forbes magazine is a trendsetter publication and it does not often use historical themes or terms - like the French Revolution- on the cover. In contrast, the magazine, together with many other business magazines often refers to the term "digital revolution" whenever they cover a subject related with Internet. For me the usage of the term digital revolution sounds very uncommon for a magazine whose original marketing slogan is "Capitalism served daily" (8) simply because of my own habitual association of the term revolution with anti-systemic ideas.

As the Forbes ASAP uses the subtitle "Business Beyond the Digital Revolution", it also presupposes that we have been experiencing a revolution right now. (9) Moreover, this immediate appearance of the term "revolution" is a call for the readers to be guard against this radical change. Forbes ASAP is the only magazine that uses the term "digital revolution" as a subtitle on the cover but it is not the publication which has invented the term. Actually as a concept, "digital revolution" was first introduced by pioneering artist groups who used the computers and for technological, artistic and cultural experimentation in early 1990's 10 After the introduction of the Internet to daily life, these groups began to use this new media and brought together a jargon for describing the properties of this innovation.

The term "digital revolution" was different from the other terms for two reasons. First, it openly indicated a rapid radical change. Secondly, it specifically referred to new technological developments and new media. Having these positive properties, the term became exceptionally popular soon Since 1996 the term 'digital revolution' appeared in New York Times in 74 articles, in Wired magazine in 39 articles and in CNN.com and Time Group in 34 articles. (11) This popularity led the term to over shadow all the other terms that are used to describe the Internet and its relation with the society.

In the late 1990's the business world discovered the Internet and revived the myth that created by the pioneering fringe artist groups, which had ruled the internet until that time together with engineers (and soldiers?). The heavy involvement of the corporate world brought together a vast economic and media power. This artificial stimulus pushed the term "digital revolution" to a new level. As the business sector intervened extensively with its agenda to the Internet, the presentation and hence the perception of this media together with the term digital revolution changed drastically.

The corporate approach immediately tried to colonize the whole network and the web of meanings around it. Consequently, the Internet re-appeared as a myth and this myth filled the main stream media channels. The conceptual shift was so clear that at the end of the 1990's, the articles about the Internet moved almost totally from the culture and technology section of the newspapers to the headlines of business and all other sections. This trend created its own exclusive publications in an attempt to relate business and new technologies. For example: Forbes ASAP, Darwin, Revolution, Wired, e -company etc. (12) This approach can be explained as the result of an overall marketing strategy. As the corporate world got more involved with the Internet, it perceived and than started to reposition the Internet as a new direct marketing tool. This new tool offered companies and individuals direct contact with "global" consumers, which meant e-commerce.

For this new marketing relocation, global corporations needed new online customers. The executives needed to find a new strategy first to get customers online and then make them click and buy. To get customers online, these customers needed to get access to faster computers and subscribe to an Internet service provider. To comply with such tasks, the companies needed to mobilize their customers immediately. All this meant that not only the companies themselves but also their customers were obliged to catch up with the lew technology as soon as possible. For this reason, the corporate world took over the term "digital revolution" from the avant-garde artists. They used the radical term as the foundation of the their new activist PR strategy to mobilize customers. The PR strategy that used the term "digital revolution" aimed at two things. The first one was to simply attract attention. Presenting a blood-dripping gilliotine together with slogans of revolution definitely

attracts attention. The major point was to channel this attention into direct action, consumption or more import; investment.

The second aim of this PR campaign was to position broader target groups, especially the new generation people or companies. To relocate the usage of computer from labs to offices and than to homes, required an offensive marketing/ PR campaign. This is where the notion of "digital revolution" was re-invented. The retrospective look and feel of the slogan from the 1960's also brought about a rebellious character, which appealed to the youth. Most important of all, the activism of the radical ideologies was converted into contemporary marketing activism.

This PR strategy proved to be very successful. The term "digital revolution" became one of the most popular new terms that marked the turn of the 20th Century. The extent of this term did not only remain within the realms of business and popular media but it also appeared in various academic texts. For example "The Digital Revolution, ASIS Mid- Year Meeting". (13) Some scholars, for example Peter Lunenfeld, at the book Digital Dialectics, began to argue for the existence of a digital age as a consequence of this "digital revolution." (14) It was true that we were experiencing important changes right at the beginning of the century due to the advance of technology. However the usage of business (not the bourgeoise) as a triggering force for radical change (was not very common and thus) sounded like a paradox for me. I believe that, this contradiction led to the dilution of the term, which lost its possible contextual meanings. Such an artificial coexistence of a radical term in business literature created a perfect counterfeit for our post-modern situation.

b) The Approach of the Millennium

The speculations about the digital revolution increased as we began to approach the year 2000. The difference of the second millennium from the first was; for the first time it was celebrated globally. Such a global grand celebration can be considered an indication of the global acceptation of the Western capitalist values by all other cultures. In this common melting point, the popular expectancies from the turn of the century had been reflected on to the new technology and the term a digital revolution became one of the popular slogans of the new millennium.

The new millenium required a new utopia. As the character of the millenium, the utopia needs to be a global one. For the occasion, the New York Public library and Paris library in France together celebrated the approach of the new millennium with a special exhibition exclusively on Utopia.(15) From the exhibition catalogue Utopia, which carries the same title as the exhibition, we learn that the idea for such an exhibition evolved; as there was a need to adapt digital technologies for conserving and distributing information globally and this concept led the libraries to cooperate on an exhibition and the book, which were labeled, as "Utopia." (16) This example helps us to show there emerged a correlation of the term digital revolution and the concept of utopia.

It is true that the new communication technologies triggered an interest in future and thus possibility of a radical change. As we approach to the new Millennium, the shift of the popular expectations from the new century shifted sharply. For example, in 1985 scientist Freeman Dyson argued that the 21st Century will be shaped by "genetic engineering, artificial intelligence and, space travel." In 1999, he changed his

choices with "the sun, the genome and the Internet "(17) These predictions also reflected to the Internet's raising power in popular culture. The popular films on space travel, such as the Star Trek, left their places for the films on the Internet and virtual reality, such as the Matrix series. (18) As the notion of Utopia shifted from space travel to the Internet and -kind of- came down to earth, it needed to be discussed in a social context as well.

The expectations from a new millennium, was also triggered by the predominant pessimism of the 20th century. As we approach to the turn of the century Francis Fukuyama announced 'the end of history' in favor of global capitalism. (19) People were already striving for new Utopias and fresh beginnings and the term digital revolution carrying the premise of a - some what- new system along with accessible utopias, seemed like as a rescue point. However the multinational companies found numerous strategies to convert this hope into profit and a possible radical shift into a vicious circle of post-industrial society

c) Usage of the Term in Popular Business Publications

The usage of the term digital revolution in popular publications without clear specific references constitutes a perfect example of a catch phrase. Interestingly enough, the term, which frequently appears in the headlines, is not mentioned again in the articles. If the term is ever mentioned twice, then the context varies from one editorial to another. Contradictions to references of the term digital revolution appear even within the same magazine. Still, the term maintains a reference to business literature in one-way or another.

As a good example, in an article in Time magazine, John Greenwald uses the term "digital revolution" in his headline but does not refer to the term in the article. He uses the phrase 'new economy' as a synonym for 'digital revolution': "Is the New Economy Dead? With the warning lights flashing, Wall Street wonders. But the digital revolution is just getting started." (20)

If we take the two words of the phrase as parts of a crossword puzzle and equate "digital" with the word "new", the term "revolution" corresponds to the word "economy." What Greenwald means by the term "new economy" and what he might have meant with the usage of "digital revolution" becomes clearer in the following words:

> ...The New Economy (as the digital revolution) is nothing more than a fancy tern for the basic infrastructure that allows consumers and companies across the globe to shop, work and play at Internet speed. (21)

Greenwalds words again clarify the relationship between the "digital revolution" and globalism, which is simply; commerce at Internet speed. In this regard, the World Wide Web (WWW) is not very different from the already existing global analogue (post-colonial) media network. (22) This situation leads us to raise the question: If it is

not very different from its predecessors why is it called new? Or why do we need to use the term revolution?

Whatever the term "digital revolution" denoted, whether it is the new economy or the new technology, the masses were ready to accept anything and welcome the term new without hesitation. This devotion to technological evolution as a modern tradition can be explained as technological determinism within the logic of western progressivism. As for the relationship between the machine world and culture, one of the pioneers of the theory of technology and civil life, Lewis Mumford projects the vast effects of the development of the machine on culture: "During the last thousand years the material basis and the cultural forms of Western Civilization have been profoundly modified by the development of the machine." (23) However the point I want to make here is that; new media is not only about machines but also about relations.

Few magazines marked the era and Wired magazine is one of them. It contributed to the creation of the term "digital revolution" brought color to all the discussions. Wired magazine's phrase, "...Digital Revolution is whipping through our lives like a Bengali typhoon..." (24) became one of the most cited phrases in popular literature concerning the new technologies. Although the radical nature of the change is emphasized with the word 'typhoon" the context of this change was never clearly mentioned. As Mark Stahlman in his article "The English Ideology and Wired Magazine" puts;"...difficulty in sorting out the origins of the ideas behind Wired and it's version of the digital revolution was painfully obvious..."(25)

Richard Barbrook and Andy Cameron argued that the ideas that are promoted by the magazine even helped for the formation of a new "so called" American ideology. (26) The founding editor of the Wired, Louis Rossetto openly rejected his affluence with these specific arguments.(27) Still, he mentioned that the magazine triggered important discussions on Internet and its relations with the society Keith White criticizes the approach of Wired magazine in these words:

> Wired is technology's hip face, an aggressive apologist for the new information capitalism that speaks to the world in the post-modern executive's favored tones of chaotic cool and pseudo -revolution. (28)

He criticizes Wired as being a fake promoter of the "digital revolution" and argues that the magazine is trying to promote a counter-revolution. He argues that although the Wired looks revolutionist it is actually a professional business magazine. It seems to be the case that this contradiction is not limited to the Wired magazine but it is true for most of the popular publications that are dealing with new technology.

The academic usage of the term digital revolution does not differentiate much from its popular usage. The book "Digital Revolution," which is published for the ASIS Mid-Year Meeting in 1996 is a good example of this. The editor Whitney Gretchen presents the term digital revolution as if announcing a new era:

> The Digital Revolution, simply put, involves both subtle as well as radical changes in the way that information is created (by anyone, for example, with a home page or e-mail account as a soap box), stored (in media, as yet unknown in archival quality), and transmitted (more and more of it, faster and faster in numbers we struggle to comprehend). (29)

Gretchen uses present tense to describe the digital revolution but at next paragraph she uses future tense to describe its effects. "We would like to think that the effects will be felt by everyone...." (30) In this manner, her attempt at an academic cause and effect relation goes no further than futuristic speculation.

Another example from the same book shows us how the term digital revolution can become a dogmatic belief. In her article Amanda Spink writes about her studies on the current use of computer networks by cattle ranchers and argues that "computer networks allow/ ranchers to access remote information sources and communicate through electronic mail and bulletin boards." (31) But, her data shows that the ranchers do not use the computer networks at all. She still argues that the change is inevitable and even cattle ranchers will use the Internet soon: "Due to the chancing nature of the American economy and business the evolution of the "electronic" or

"digital" ranching community seems inevitable.(32) In both of the previous examples the business sector plays the key role in triggering a radical change. So it is not a class but sector that triggers the so called change.

According to Negroponte, the "prophet" or the digital culture, technology is the force behind the evolution. "Like a force of nature, the digital age can not be denied or stopped".(33) Negroponte's usage of the term digital revolution is almost prophetic and hence has a reference to evolution in some way or another. Still, his calling for immediacy of the radical change is ignoring importanttechnical and social problems the new technology still has today. I will try to refer to these problems in the following pages.

In the above examples, we have seen the ubiquitous usage of the term digital revolution by the corporate media for the promotion of the new technology market. While the term "digital revolution" as used by this marketing strategy remains a catch phrase without specific references, it nonetheless appeals to certain popular associations inherent in the individual components of the term, 'digital' and 'revolution'. In the following sections I will examine these associations and how the marketing strategy exploits them. In this way I will try to locate the potency of the term digital revolution in its movement between its usage in popular literature and its relevant associations. This PR strategy seeks to give the impression that the digital revolution is taking place. I will therefore examine whether the new technology is really challenging the operation of the contemporary materialist society or not.

d) Methodology

Initially I argued that the phrase "digital revolution" has become a "catch phrase" with no clear reference. In order to dwell deeper into the meanings of term I will deconstruct the phrase into its parts, discussing each separately. I will study the term "digital revolution" by discussing its components, "digital" and evolution," separately from an interdisciplinary perspective.

I will cover different fields including media theory, history of technology and political science. I will concentrate on comparisons between popular and academic approaches in the belief that it is in the duality between popular and academic, mainstream and alternative approaches that the true meanings of the terms lie today. Not the first but the second chapter is devoted to the popular usage of the term "revolution" and references embedded in history, politics and industrialization. I will give specific examples and request a re-consideration of specific political references such as "revolution," "utopia" and "ideology" in the context of late post-modernism. The third chapter is dedicated to the term "digital", mainly referring to history of technology, information technology and media studies. This chapter covers

popular, literary and technical references for the term "digital." It takes the term "digital" as a concept rather than a technical format. I will give special emphasis to the notions of digital media, networks, de-materialization of information and global interaction. The ideal meaning and the practical implementation of WWW will be of special interest.

In a book on digital revolution, I felt the need to devote a chapter on Utopia firstly because in a modern context, the term's 'revolution' and 'utopia' are used together. But there was no place for an abstract Utopia in corporate literature. Hence I described the indirect references to Utopia in the presentations of the notions of Internet, WWW and other software. As a criticism to these approaches, I discuss the technical capacity and the boundaries for WWW and importance of the interaction together with content production. In this context the discussion on 'copy/ right' and "right to copy' brought the concluding remarks.

Finally I use my findings to open a new discussion of the term "digital revolution" involving a reinterpretation for the concept. I will argue that although the global digital interactive network has the technical capability to transform the very nature of (information related) matter, the interactive network itself owes its existence to matter, the materialist society and it's social relations. It is this mutual relationship where the notion of a probable radical change stands. In this situation popular participation plays a crucial role. The question is whether the power of technology is sufficient to change social conditions, and signify our time with its very existence or the social involvement will shape the technology so that it leads to a further radical change.

Chapter 1: The Term Revolution in Popular Publications & It's References.

At the end of the 20th century, the raising popularity of the term 'digital revolution' leads us to reconsider the references of the term 'revolution'. The term has begun to be perceived different in post-modernity than it had been previously in the century in a modern context. Today, the term revolution still exists as a title for old school socialist publications. (34) but this time the term is also used as a title for new school business magazines. (35) I believe that this is a bit problematic. Coexistence of the same term in such different contexts gives us clues about the nature of contemporary, post-cold war societies. Plus, de-constructing the new cliche may show us a way to break the post-post modern cycle.

a) Current Usage of the Term Revolution in Popular Publications

While the term revolution exist as the title for different magazines, I argue that its usage for business is especially different from all the others. For example, the magazine Revolution clearly declares in its introduction; "

> Revolution is a new monthly magazine aimed at equipping marketers and other senior business people to understand digital media such as the Internet, interactive TV and wireless networks."(36)

In popular business literature, the magazine Revolution is not the only magazine that carries such a provocative title. Another magazine Darwin (37), can be considered as another example as the title immediately reminds us of the evolution of the species. My argument is that these two examples are enough to signify a strong trend other than a misuse of the term. The trend is simply to relate the term revolution (or evolution) with the business sector and new technology, ignoring its historical and social or biological context.

One of the most striking usages of the term "revolution" is not to name the titles of the magazines, but it was to define companies or business models as revolution. For example, in Time magazine, Adam Cohen names his article, "A Crisis of Content," as "Napster [The Revolution]". (38) In this article Cohen stated "Network file sharing has profound implications for the business model of the entire entertainment industry...within five years the music industry will loose $3.1 billion to piracy and the new sound independence of musicians." (39) Napster is not only a phenomenon in popular literature but also it has been widely referred to in academic discussions as it has "changed the world". (40)

In this case, we are talking about a private company and its business plan that is triggering the socalled new revolution. So in the case of Time and some other

popular publications, the term revolution is not only used in the business context but the business models are described as revolutionary factors. Hence this usage of the term not only de-contextualizes the term but also assign the term a new role.

Personally I am sensitive about the de-contextualisation of the term revolution because I have distinctive experience about the change of the meaning of the term "revolution". In Turkey, during the military intervention of 1980, authoritarian military regime, overthrew the government, closed all the political parties in Turkey and furthermore prohibited the use of the word revolution; *devrim* (41). It was banned to be used even in our textbooks and instead we had to use an old Arabic word -*inkılap*- which has no reference to revolving.(42) Up to that the time, the term revolution had the same meaning for me, that it would to an American thinking about the American Revolution. (43) But this specific case showed me that changing the usage of a word might be a part of a larger project of depolitization process.

Today we need to observe that the erosion of meaning in the term revolution maybe the result of a global capitalization and depoliticization process. But the question is, in a period that we have begun to talk about end of history (44) and politics (45), how can we still look for a social meaning in any term? In order to find answer to this question I will refer back to history, as Jameson says;
"Always historicize!" (46).

b) Modernist References of the Term Revolution

Revolution is a "modern" term associated with the project of the enlightenment. It's references can be traced back throughout history, and this continuity became a symbol for the Western positivist, progressivist development project. An important point is; a possible end of the meaning of the word may also signal an end of the Western progressivism as well!

As we trace back to the history we see that the word was first used, at Nicholas Copernicus's book, titled "On the Revolutions of the Celestial Orbs" in 1543, which contradicted the universal plan of the church and initially caused controversy with it. (47) Copernicus' book scientifically proved that the teachings of the church on our solar system, was wrong and the sun was at the centre of our solar system. So originally the term have a secular contradictory meaning.

It was the printing as the alternative media to hand writing, which made these ideas widely accessible to more people. At that period the church controlled the text reproduction process and as a media cartel, it was no different than today's multinational news networks. The ownership of the media brought an automated censor system. It was only after the adaptation of print from the Chinese, as an alternative media, that new thoughts could have been widespread. So the technology helped the wide spread of the new ideas but also it is education reforms in the Reformation period which lead to a cultural change. Steve McGeady, in his

article "The Digital Reformation" compares the evolution of new media with this period. (48)

As the masses begin to get into the picture, the term revolution radically shifts to politics. The French Revolution of 1789 was about overthrowing the ruling classes. Not the technology but the masses were actively involved in the process. (49) This led to a faster radical change to take place and "...resort to arms transformed the struggle of social order into a civil war, which abruptly changing the character of the revolution".(50) The French Revolution became the icon for the term as Europe began to change around the ideals of liberty, equality and solidarity.(51) Almost a century later, Karl Marx defined his concept of radical change as "revolutionary re-constitution of society at large" (52) also referring to French Revolution.

Marx's definition of revolution is still the most renowned definition of the term, similar to the French one but emphasizing equality more. After the Russian and Chinese Revolutions the term began to symbolize ideological blocks in the world especially communism. During the Cold War, the term revolution began to recall civil war and the violence of the revolutions had been more emphasized. Chalmers Johnson, in his book Revolutionary Change openly called for violence for radical change: "Revolutionary change is a special kind of social change, one that involves the intrusion of violence into civil social relations." (53) Because of the extreme violence all over the world, many people died in 1970's. Those were terrible years, I still remember as a child in Istanbul, reading about raising death tolls everyday. People were dying for a revolution.

In the light of all that has happened, today it is very weird for me to see that the business magazines can easily refer to the violence of the revolutions, without hesitating to remember that once revolutions were disruptive and anti-systemic. In what point we can talk about a merger between these radical anti-systemic ideas and contemporary business entrepreneur mentality? The end of the Cold War end the polarities. When there is not black or white, grey color invaded the universe.

Richard Barbrook and Andy Cameron wrote in their famous article "The Californian Ideology"; technology provide a common ground for groups that would never have come together.

> This new faith (in communication technology) has emerged from a bizarre fusion of the cultural bohemianism of San Francisco with the hi-tech industries of Silicon Valley. Promoted in magazines, books, TV program's, Web sites, newsgroups and Net conferences, the Californian Ideology promiscuously combines the free-wheeling spirit of the hippies and the entrepreneurial zeal of the yuppies. (54)

Barbrook and Cameron in their article not only define a class base for their ideology but also relate it with social consequences and they define their approach different than the other ideologies by naming it Californian (55), as I argue a new 'American Ideology". Mark Stahlman in his article criticizes Barbrook and Cameron's approach and mainly associates them with a popular magazine, Wired. First he argues that the presented ideology is not original as it "not American but English".
(56) Secondly, he argues that the arguments around the digital revolution are not clear.(57) The editor and publisher of the magazine Wired Louis Rossetto wrote an article to answer these arguments and stated that he is not affiliated with the Californian Ideology. (58) He concludes that:

> Europeans are recognizing that 19th century nostrums are not solutions to 21st century problems - on the contrary, they are the problem - and it's time to encourage competition risk taking, democracy and meritocracy, and dare I say it, dreaming about a different, beter future. (59)

Modern political history enables us to bring a linear explanation to social evolution but when we come to contemporary issues of today, this linearity is broken and the relation to the past might almost become absurd. As a possible explanation, Poster argues that "there is no adequate 'postmodern' theory of politics" today. (60) Hence,

though reference to political history solidifies our ground for discussion it does not provide certain clear answers. It just helps to prove the banality of the usage of certain terms in post-modern conditions. For example this is how Bill Gates promoted his company in Harvard Conference; "The Personal computer revolution has been an amazing thing". (61) The important point is to clarify how much of this banality is constructed and how much occurs by chance...

The discussions of the revolution today use the icons of the political revolutions as imagery but they also draw their examples and references from Industrial Revolutions. It is mostly associated with Industrial Revolution as a whole and not individual revolutions. The industrial revolutions can be referred in sequences as Castells or Mumford does but they can not be individually related with every single invention.(62) The sequential relations of Industrial Revolution further enhance their relation with the time period and its social and political consequences. But the major problem is that the social is missing again in the picture. The masses are only referred in terms of consumption and ownership: Again is referred by Gates: "today some thing (like 85 percent of the computers on the planet runs the same operating system" (63) which is a Microsoft product.

These arguments can be considered as an attempt to create a ground to state that we are living through a new phase of an industrial revolution. (64) But what is the big difference? Castells says that the a process might be more important than the results:

> What characterizes the current technological revolution is not the centrality of knowledge and information, but the application of such knowledge generation and information processing/ communication devices, in a cumulative feedback loop between innovation and the uses of innovation.(65)

The 'feedback loop' mentioned here is very important because it gives us criteria to test whether there's a revolution or not. This feedback loop is about human communication and interaction in a two-way relation. So that if we can talk about massive interaction and two-way content creation as a response we can talk about a change. But if we get a closed-source hegemony instead of opensource,

we can not talk about a feed back cycle and we can not talk about an evolution.

To create such a feed back effect, there needs to be a different social consciousness. There also needs to be a total change in the society as a whole not just in the technological realm. Although the changes in technology do effect the society and vice versa we need much more different and all encompassing social conditions to experience such a radical change which pertains to a revolution. Otherwise the term revolution remains as a simulation. (66)

Chapter 2: Discussing Digital as a Term, a Title, a Format and as a Concept.

Today the word "digital" is no longer a simple technical term. It carries lots of references and meanings embedded in its seven letters. The term itself today may not only be used a substitute for the term 'high technology' but also for the term 'new'. It is true that alongside the words 'revolution', "ideology" and 'utopia", the word 'digital' sounds as like the newest word of all but it is not. Hence a study of the term digital should take into consideration of other possible references.

While making a study on this book I came across to a magazine with the title Digital. Digital was one of the supplements of Time Magazine. Digital uses its title as the logo, written in silver color, larger than the original trademark Time. The magazine describes itself as consumers guide to technology and provides articles about new technology together with new product information.(67) The title 'Time Digital' when read together, made an analogy with what Lunenfeld described as "of our immediate present time, as digital. (68)

The magazine Digital is a good example of how popular magazines mostly prefer to refer to the phrase "digital' as a format of products. (69) As we look at Digital magazine, the first thing we notice is lots of ads. The difference is the use of the branded digital products as editorial pictures. (70) Even with in the articles, we see digital products as icons representing the technological advancement. Branded gadgets such as Sony mp3 players, or Macintosh Laptops, other label cam

corders and cameras are located right at the very center of the editorial pages. It seems to be the case that the reason for this layout is not only to promote these products via indirect marketing but the real reason is that the digital consumer products are perceived as the central point in presenting new media. Hence the images of these branded products not only function to visualize technological change but also they serve as the totems for the new technology utopia. As these magazines present, it is the trade marked gadgets that are supposed to make the change by themselves.

Keith White criticizes the commodification approach in popular magazines with examples from the Life Style section of the Wired magazine. Further more he compares this approach with an overall business strategy: "Magazines that cover particular industries are always tempted to let down the wall between advertising and editorial, since the subjects of their articles are also the buyers of their ad pages."(71) He concludes arguing that especially in the new media sector, the blurry boundary between the editorial and ads has almost disappeared.(72) The commodification of the magazines that are supposed to be related with "digital' are very significant. The contrast is more obvious when the notion of digital" is taken as a concept instead of a format. As a concept, the digital technology supposed to bring a shift at least in the form of transformation from hardware to software, from material objects to code. These magazines, on the other hand, are mostly about hardware products.

A similar criticism can be raised in terms of the material of these magazines. The popular magazines that are praising the term 'digital' appear mostly in paperback. Most of these magazines have web sites yet they still continue to maintain their presence on paper. To advertise physical product they felt the need to be physical. A magazine owner, publisher, Abraham Lubelski confessed me that the paperback format of the magazines is to satisfy the demands of the advertisers.(73)

Similar situation is true for the paperback books that are praising the term 'digital'. The new media prophet Negroponte argues "there are just not enough digital media in the hands of executives, politicians, parents, and all those who most need to understand this radically new culture."(74) Lunenfeld try to explain the paradox: "We

still will publish in book form that which we deem to have lasting significance. Nothing ages faster and becomes inaccessible quicker than electronic media. (75)

It is true that the technology has affected the whole publishing and media production. Today most of publishing is prepared digitally but printed on paper some how. So there is a change but whether this can be considered as a radical transformation or not, is the first question. So if we are not talking about a radical transformation for today, the second question is when is it going to happen. Negroponte answers these questions and contradicts with himself: "Being digital is different. We are not waiting on any invention. It is here. It is now.(76)

Although the digital technology offers us today a new process in which we have the chance to challenge the "material" usage of the information, popular media channels pump up a life style, which we seem to reach only if we use those "digital' consumer products. It is true that to use the new technology we need to use at least some of these machines. But still if the usage of these products reaches the limits of the product fetishism, we can neither talk about a radical change nor about a new era. I believe that, that is why we need to search for the references of the term digital and try to clarify what we are talking about.

a) The References of the Word 'Digital'

The root of the word 'digital' is 'digiti' in Latin, which in English means "fingers".(77) These fingers, as we all might remember, served as our first computing tools. Also, in mathematics, the numbers in the decimal counting system are called digits, again derived from the total number of fingers on our hands. All the fingers (digitis) as decimals were symbolizing something except the number zero.(78)

Unlike our first computing tool, the hand, advanced computing tools, computers, use only two of these ten digits, zeros and ones.(79) These two numbers together create a system called the 'binary system' which is the basis for the all operations in the computer. Computers begin using binary language in the early 1940's. (80) From that moment on, the meaning of the word began to change drastically with the evolution of the computers and later with the new communication technologies.

Computers have also been used as a military tool for "... global surveillance and control through high technology..." (81). All through the Cold War, it was not only computers but also the human finger, which controlled the nuclear bombs, so the digits were no more guilty than the fingers (digitis).

After the Cold War, this expensive military toy suddenly became useless. There was no other Super Power left to fight against. So military technology began to search to shift to a new area. At that point in history there came three turning points for

computers and digital technology. The first one was the invention of the microprocessor and the second the invention of the global interactive computer network, the Internet. (82)

The first invention helped computers become available for personal usage and the second invention connected the computers together in a network. With the introduction of the user-friendly interface, the computers become more user friendly and it changed the way people use computers.83 As computers began to process multimedia and as these media began to be accessed through the Browser software using the Internet, in early 1990's, the role of computers and the digits have changed. And as they changed, they started to demand change...

b) Digital as a Medium in a Single Machine

Computers as computing machines became a medium by calculating numbers and re-presenting them as text, image, moving images and sound. Additionally with the development in programming we began to talk about virtual machines (immaterial tools) within the machine (84) As a concept, this representation ;created a shift in human perception and brought new questions to the technical discussion.

> The computer, in other words, imagined the screen as a grid of pixels, a two-dimensional space. Data, for the first time, would have a physical location-or rather; a physical location and a virtual location: the electrons shuttling through the processor; and their mirrored image on the screen. (85)

Just as the digitization process began converting media into a mathematical)code, we began to be able to digitize almost any media format, image, sound, space and motion, into code. Negroponte argues that this process is the ultimate solution to s representation problem:

> When all media is digital -because bits are bits- two fundamental and immediate results will be observed. First, bits commingle effortlessly. They start to get mixed up and can be used and reused together or separately.(86)

In theory these conversions are very simple on paper. In practice, bits are not simply just bits. In all calculations there are several translation problems.(87) he digitization

process always requires appropriate software and tools, coders at the beginning and de-coders at the end. It is these coding and decoding machines that are classified under the format digital. But as a format in consumer products, the digital might not need to be radically different than its analogue predecessors. This difference becomes clearer if we put a distance between capturing and recording process.

When we scan and hence digitize a photo, every color, tone or contrast is transferred into a code number. So instead of the proportional and continuos chemical reaction of the film, with scanning we have a group of code numbers all together defining the same image. In both cases you need space to record that information. When you take a photo or a film you record the information automatically on a film but when you digitize an image it's pure information code. In the case of the code, you can save it on different materials on floppy, CD or keep it on the hard drive or send it immediately to another location. It is this remote computer based information storage, which gives us the feeling of dematerialization especially when we talk about information storage on distant servers.

Converting the information into code has advantages and disadvantages. If you can succeed in digitizing all information, you will experience a notion of non-linearity, an independence from time (in terms of rolling tape time) but this will require a larger memory space, more powerful computers and larger hard drives. In most cases you need to purchase this memory space as if you are purchasing analogue film. And time consumption is important. Even opening and closing of an operating system, will take processing time as if uploading or downloading a software or a single file.

Digital, as a format, has certain advantages over analogue format as well as disadvantages. The superiority of the digital is more evident as a media within a large network, especially an interactive one like the Internet.

c) Digital as Media on a Network of Multiple Machines

The digital medium becomes different when connected to a network, it becomes media. The difference is not only the sum of the computers that are connected to each other but also the people. A global network of computers is greater than the sum of off-line computer networks or Intranets.

They not only create communication but also create a large storage space, a virtual hard drive for all the users on the network. These individual machines and their information storage capacities together create a notion of artificial memory it is called Web. As this space is not only designed for storage like libraries but also it is designed for communication we began to talk about dynamic information which renews itself all the time. It is the storage capacity together with continuous interaction, flow and transformation that differentiates the network from other media. As the computers and their networks begin to carry, store and exchange multimedia as text, image, sound, video, they challenge the classical notion of communication.

> The computer, when linked to a network, is unique in the history of media: it is the first widely disseminated system that offers the user the opportunity to create, distribute, receive, and consume audio-visual content with the same box. (88)

Analogue telephones can carry sound and have a global network but can not carry or store multimedia unless a computer (or another machine) is attached to at least one end. The possibility of one to many, many to many communication is very limited with telephones without specific devices. And both parties at both ends need to have those devices or infrastructures.

While televisions can carry motion image and sound, they do not have a unique global network Publishing on TV is very expensive and the dream of creating personal content for broadcasting remains in the alternative regional public TV experiments. Therefore TV today functions globally as a tool for consumer marketing and propaganda.

The global one-way media network (89) that I argue to be created by global cultural imperialism (or vice versa) provides a one-way de briefing and closed to the feedback. Consumer culture flows from West to East or from North to South in exchange for the wealth of the under- developed world. This contradiction embedded in the global capitalism further imbalances monetary balances, increases poverty or results in the destruction of the nature.

In this regard a global interactive digital network, for example the WWW, should prove to be a different kind of network. First of all it should enable a two-way communication. Secondly it should really be global and interactive. The other players should take part in the system and they need to be active for a full communication process. To make a change the audience should participate.

To create such a network we also need certain material conditions. For example, we are talking about a computer as a single box but in reality this box should be the right one and should be equipped with many other hardware and software. Furthermore, the quality of the Internet connection is also very important for the speed of the

access. So though the digitization processes and the network is promising us a dematerialized virtual environment for two-way information exchange we need more and better machines and good connections to reach this end.

d) The Concept of Digital in Relation with De-materialization Process

The digital connection with the Internet, in certain conditions, enables us to alter the physical existence and go beyond certain material conditions of the society and institutions in terms of information creation, exchange and production. The digitization process can lead to de-materialization when performed on a network in certain conditions. This process is about the transformation of the information into code and relocation of the storage process.

When we store the information in one place but retrieve it in another place, in real time, this leads to a challenge to the existing material conditions. Therefore the de-

materialization process on the Internet bring a new dimensions to the notion of copyright and hence property relations. (90) It is true that this transformation is technically possible today but the execution of this process is very much related with the definition, properties, capabilities and the limits of the Internet and the so called WWW.

The de-materialization process was possible with computers and the digitization process but it is not sufficient without some kind of a large network. Without a network, the digitization process ends up with digitized information on a physical machine or a recorder. So without a network we transform the information form one material object to another, from information on paper back to information on a hard drive, a floppy, a tape or any other physical recording device. When connected to a network, we still transform the object from a physical object to another but this time the recorder escapes from our perception. And in he case of the Internet we open a way to the information sharing and interaction with others in real time. In that case the information goes into a stage of flux and continuous evolution.

This technical process which brought a superior property to information is referred by the scholars Dyson, Gilder, Keyworth, and Toffler as: "The central event of the 20th century is the overthrow of matter". (91) It is true that we began to perceive a shift from matter in favor of information but this change is still not a radical one and related very much with the context. This shift, can be explained in terms of de-materialization process, but will be limited to the WWW and to information related production. So the realization of the WWW might lead to change.

In de-materialization process, the context and its references are very important. This shift is more contradictory when we talk about established institutions in their relation with experimental examples. This situation, which I argue as the representation problem on the Web, can be observed in the web site of the Museum of Modern Art (MoMA). In its web site (92) MoMA exhibits online art projects, refers to its exhibition program and lists its permanent collection. The paradox emerges as MoMA exhibits the online art projects but does not list them under the title collections. (93) I asked one of MoMA curators, Barbara London, the reason. Her answer was simple: the online art projects that were on exhibit were not collectible. If you copy the web site to

a Zip drive of just copy it on a hard drive, the net projects will lost its properties.(94) As far as the net-art is concerned, the relationship between the artist and the audience is very critical, hence the documentation is not easily possible.

As an artist, I participated in a couple of net art events called "Chaos in Action" in 1996 and 1998.95 In these exhibitions, the artists communicated through text, digital images, text, sound, recorded video and web casting, sharing all of this information as a net-art process, using decentralized servers on the Web I had created images and post on the web without using any intermediary material basis, such as canvas or paper. (96) At times, I felt that we reached a higher level of communication with other artists - whom I never met in person- all throughout Europe, together with a global audience linked from the portal of the Center Pompidou Paris, whom we never met in person.

That event was important for me because as an artist from a third World country, I always had problems travelling abroad for exhibitions and conferences because of visa problems as a Turkish citizen and travel costs. While it was crucial for me as an intellectual to share my ideas with an audience, the national, institutional and material conditions always brought certain barriers for communication. Therefore net-art was a relief for me to a certain extent.

At the Chaos in Action performstance I had created, edited and uploaded visual images where I did not need to use any material element to record to; like a piece of paper or a CD. All the instruments I used -a camera and a scanner- were connected to a computer. We downloaded the software free from the İnternet. After manupulating the images the information is sent and than stored far away in a server in Cologne, Germany. The interesting thing was I got the responses from other artists, as artworks, for example one from Cracow Poland, in real time. This was an encounter I had never experienced as a painter and that is why I believe that it was an important experiment.

What is art and what is not? The conceptual reference of the artwork is as important as the creation process and the context. Therefore the replicas of the artifacts at Metropolitan Museum's web site can never be considered art on the web. (97) While

there are some rare examples of artwork on the net, which differentiate themselves radically from the conventional ones, as they are created for and can only exist on the Web. I argue that these are the ones that make a change. After Chaos in Action project I continued working on the net and established a virtual museum on the Web, Istanbul Contemporary Art Museum (iS.CaM)(98). The iS.CaM does not exist in the real world as a real institution and it contains art works, which do not exist in the physical world." In this manner this project was a bold criticism of the status quo in terms of art, culture and also in politics because the discussions on museums are still considered as a political issue in Turkey.

Self-publishing is another fundamental property of de-materialization. For example, while working on this book, I studied probably some of the 'best' libraries in the world, including New York University Library but I was not able to reach certain critical documents without the help of Internet and search engines.(100) Certain documents are only available on the web because of either choice, or simply because of other legal and material conditions. Censorship is still an important problem for some countries and self-censorship is a problem in others. Gate keepers may increase the quality but decrease the efficiency.

One of the most important outcomes of the de-materialization process can be seen with its effects on identity. Together with the low cost of one-to-many publishing, new approaches for the notion of identity and anonymity have emerged. Anonymity is very much related with getting rid of material, the legal and visual references one is accustomed to. This new concept of identity is mostly refereed in terms of the interactive games (MOOS), which I believe is the simplification of the whole approach. (101) Again this led to the perception of the notion of virtual reality in terms of games. But the notion of virtual reality and its perceptive disorientation should not be compared with the dematerialization process. While virtual reality is about the illusion of the eye, the de-materialization is related with the shift in time and space that are the properties are unique to large networked environment.

The concept of the web is built on sharing information in anonymity because the process of viewing each page is downloading them first. So whenever you see a page it is already, recorded as a temporary file, in your computer. This is not like that

in any other media like TV, radio etc. So the concept of property relations on the net is quite different than the analogue media. Also the hardware and software you use to surf the Web enables one to copy any image, text, structure or code easily on the web with a single command. I argue that the technical change together with de-materialization will threaten and alter the notion of copyright and property relations around information. Moreover it will affect the processes of production and consumption. Yet this radical transformation of information related products still remains confined to the specific conditions of the Web. The Internet which supports the Web is of course very much bounded with material infrastructure. This infrastructure is related with the consumer society and consumer goods. It is carrying the reward of introducing de-materialization into the society still the fact that it is bounded with material conditions, creates the paradox for the Internet.

Furthermore, consumerism today has extended its borders from material objects to de-materialized information. Software itself became a commodity and its properties are very much determined by the flexibility of the market structure ruled by the software cartel(s). Today, the situation is critical. Though the new technologies bring new opportunities for development, the current market and institutional relations immediately try to colonize the 'new found land'. This interdependence not only restricts a possible radical shift but also creates a vicious circle, which can only be analysed in post-modern context.

Chapter 3: Contemporary Approaches to Utopia:

After a long research, I come to the conclusion that the blurry boundaries between the usages of the terms digital, revolution, digital revolution and Utopia have disappeared in post-modern context. So, the term digital revolution, together with the other terms, appears to be a Utopia in itself. But to re-construct the term digital revolution as the Utopia we need to de-contextualize the term from its previous corporate contexts.

This situation is clearer in terms of the Internet, new media and their presentation to society. As I have demonstrated in the previous chapters, the terms digital revolution, revolution and digital are presented as business models and/or marketing strategy concepts. A similar but indirect approach is applicable the term Utopia because there is no room today for a direct reference to an abstract concept of Utopia in popular literature.(102) It is the indirect reference to bussiness Utopia, which is filling the classical media today. The contemporary approach to Utopia is taking it as a corporate model or a life style. This not only makes Utopia very applicable but also makes it possible in a short period of time within the current conditions. In this case, the questions for 'where and when' is Utopia have the answers, 'here' and 'now'. The Internet technology, together with global capitalism, ads a third word to the answer list: 'everywhere'. Just buy it with your credit card.

Technological determinism is the melting pot for corporate and noncorporate approaches. This adds the notion of evolution together with Western progressivism to the big picture. The corporate approach contains an unstoppable shift in technology (103) while the alternative circles remain more skeptical in terms of time and the scope of the change in social conditions. The most important contribution of the new

technologies to the discussion of Utopia is that we are no longer talking about totalitarian or mega ideologies but rather minor politics (104) and these ideas are expressed in different ways.

We also observe coalition of small diverse groups instead of large homogenized parties but all in a grand picture called 'globalism'. Naomi Klein in her article, "Were the DC and Seattle Protests Unfocussed, or are Critics Missing The Point?" Mentioned that the protests in Seattle and Washington were not demonstrations of one movement. She further argued that:

> What emerged on the streets of Seattle and Washington was an activist model that mirrors the organic, decentralized, inter linked pathways of the Internet- the Internet come to life.(105)

The protests against global trade are also an applicable link for the modern references of the term revolution and they are very necessary. Still, I argue that to observe the emerging new minor ideas, about anti-corporatism we need to research new areas. We can not find and adopt simple models explaining today's situation. To find some answers to our questions, we should not only search for the answers in their previous locations or institutions but also we should search explanations in daily life, in arts (106) and/or on the Internet. There are still alternative approaches to the corporate ones and the first thing we should do is to present the situation as it is and question it as much as possible.

a) Branded Indirect References to Utopia

The goals of the corporate world are simple and straight forward, getting rich in the shortest possible time to purchase your own utopia. When we add the new technology in the agenda, being 'hip' ads to equation. (107) Business magazines are build around this theme, hence none of them specifically refer to the abstract concept of utopia directly. On the cover of one of these magazines, e-company, utopia is defined indirectly: "Internet Nirvana: The Web will revolutionize your company —just not the way you thought." (108) In the editorial section we read that the reference of utopia is lade as an ideal company model, and the big picture is just a new business plan, as it was the case for the previous terms of revolution and digital revolution, you have a good business plan, utopia is yours. (109)

It was no coincidence that the founder of amazon.com Jeff Bezos was chosen as man of the year by Time magazine in 1999, just at the turn of the new milllennium. (110) The company had successfully introduced the edition of an online book store without physical sales locations but as it sells real books and other real products, it needed to open physical logistics and hence remained as a variation with in the limits of direct marketing. It neither created radical change nor continues to hold its record breaking market value. (111)

The market crash of Nasdaq in Fall 2000 proved the inflated market values of the new technology companies. This virtual value creation of the technology sector had

been created with the best marketing/ PR campaign of the previous century The overall strategy of these campaigns is very clear in the book; 24 Hours in Cyberspace: Painting on the Wails of Digital Cave which is sponsored; Adobe (112), Sun, AOL, Netscape and Kodak.(113) This book, or rather catalogue, mainly presents the World Wide Web as accomplished, as a reality that is happening right now and every where on the planet. As the editors argue; "the cyberspace is no longer an abstraction; it is now the real world- the marketplace, the battle ground, the house of prayer, the secret retreat."(114) The arguments in the book is important as they constitute the main stream ideas of the popular media which establishes that we are 'already' experiencing radical change. (115) The epic short stories in the book are about the miracles of the Internet, how e-mails saved lives, are presented as the proof of these arguments. However the Internet and interactivity are being pictured as objects, instead of the subjects Old computers without any connections serving as the icons for the divine Internet and diverse people and places as a background to remind us global interaction. The use of people of diverse colors as models, from different ethnic groups, religions, age groups, from different identity groups reminded the, marketing campaign of United Colors of Benetton (116) while the indirect references to revolution embodied in the slogan "the real thing" which had probably been borrowed from the marketing slogan of Coca Cola:

> Revolution has become commonplace in our vocabulary, and so the real thing is hard to recognize But the stories told in this book and its companion web site make it clear that nothing less is afoot on the Internet today. From Inuit children doing their homework to Benedictine monks selling monastic fruitcake, this is the stuff of deep innovation and change. (117)

In this regards, the Internet is also presented as a FMCG, a global consumer product, like a blue jean as pop as Warhol's Campbell Soup cans, ready to be consumed. The paradox of the book shows itself as we learn that the book, which argued to tell the interactions of the real people on the Internet, was produced exclusively by professional journalists. Furthermore images were captured with film with professional cameras and transmitted via regular mail (118) This contradiction

reflects today's one way global media network, which is neither totally digital nor does it trigger interaction for the ordinary people and ask for their feedback.

I want to argue that the problem of non-interaction might be solved through dialogue instead of monologue. Jurgen Habermas in his book Communication and the Evolution of Society (119) refers to communication as a factor for social change. In his book Habermas is emphasizing the role of speech or dialogue {Sprachpragmatik) in the communication process (120). I believe that this structure can be interpreted to show the importance of interactive communication. This reference might lead us to the point that, Internet or a similar technology, if used properly as a two-way interactive medium, still has the capacity to lead a social change. But witch media or language are we going to use?

Global interaction is very important but it is not the answer to all problems. It might be even illegal in certain cases. For example, Dana R. Fisher and Larry Michael Wright, in their article "On Utopias and Dystopias: Toward an Understanding of the Discourse Surrounding the Internet" (121) present Napster and peer-to-peer interaction almost as Utopia. They argue for the superiority of the software referring to the legal conflict: In the words of Judge Marilyn Hall Patel, "essentially a program to facilitate the downloading and uploading of music . . . pirating be damned is the sense one gets" (122) They argue that the probable cause of the legal disputes can be explained with the theory of' cultural lag'.(123)

In the same article Napster is exagerated again as a software that is capable of "changing the world." (124) It is the popularity of Napster, which created the legal case and all the myth around it. There are lots of free software on the net which function similarly or even better but none of them had the chance to reach it. The popularity of Napster is probably because of its dual relation with the music industry. While the file sharing softwares seems to threaten music industry with, so called, 'pirate' (125) mp3's transactions, the sector responded this to situation by manufacturing portable mp3 players and closing the commodification circuit. (126) So the industry compensates for the losses from the copyright
through the sales of the new products. Plus, the discussion around the issue helped to promote the youth market, which loved the feeling of rebellion.

Not a file sharing program but an operating system (OS) Linux, is another example of a shared software (or code) on the net.(127) The importance of Linux comes from the fact that it is the one of the few free alternative OS to the Microsoft empire. Linux is not only been shared free on the Web but also it functioned as an open source for development of the software itself. In this way the users add up to the original code and created a good example of networked solidarity. I believe that the notion of participation and interaction in the case of 'peer to peer file sharing is very important and significant in the case of Napster.(128) The missing part in the dilemma is the capacity for original content creation within or through the interaction, which if had happened would never lead any company for any legal disputes. Furthermore, in that way the Napster as software might really lead to a radical change. I argue that on the web original content {or code) creation is as important as interaction and sharing. It is the only way for the web to stay as an alternative media.

b) Alternative Approaches to Utopia.

The most important difference in alternative approaches to the corporate ones is that they perceive interaction on the net as something different than consumption and/or propaganda. Hence they question the current situation, the Internet and the so-called WWW This notion automatically leads to a difference in the perception of world as global unit. The conservatives presents the global situation, as accomplished. This notion is also clear in the declaration of Francis Fukuyama, who announced that 'the end of history' before the end of the 20th Century, in favor of capitalism:

> What we may be witnessing is not just the end of the Cold War, or the passing of a particular period of postwar history, but the end of history as such; that is, the end point of mankind's ideological evolution and the universalization of Western liberal democracy as the final form of human government. (129)

Many have criticized the ideas of the Fukuyama, but I argue that the most important challenge come from the new technology. As people began to communicate and share information on a global level more easily, this reminded them of the inadequacy of the international political, media and economical structure which were based on limited or no fair (two-way) exchange. Global capitalism today only lets the free flow of money but not of people or goods. The new technology, in certain conditions, helped the new ideas to travel more easily but the borders and material conditions were restricting their physical transportation. So if we claim to be liberal lets be liberal for all. Also we can not talk about a global democracy for individuals, I physically can not vote in any other country. If we are global citizens we need to have global rights. If it is a global democracy we need to vote globally.

These utopian ideals may seem contradictory for you but with the help of technology we have certain new rights. We can talk about a limited but possible global information exchange through the Internet, for example virtually voting for opinion polls on any country is free for all just with an online access.(130) This technological possibilities brought by new media and the Internet technologies, reminds us of the incapacity of the current international structure and the need for change. This urgency can be considered as a definition of a new Utopia for the periphery, but a change for the center is also necessary to surpass the crisis in modernity.(131) In their article "Technological Development and Organizational Change: Differing Patterns of Innovation" Dierkes, Hofmann and Marz argue about the deep-seated 'crisis of modernity.(132) They argue that interest on future and (new) technology today emerges from this crisis. I argue that the crisis of the West emerges as it almost closed the two-way communication with the Rest. A possible solution is a two-way communication with different cultures in a way that includes a two-way contribution.

The definition of the crisis in modernity and its solution requires more in-depth debate. Still, a case study on a web-site www.dna.com will help me to prove my point about the importance of interaction with minor cultures. The web site http://www.dna.com is a site built to promote a project called "The Gene Trust". According to its organizers, this project "has the potential to change medicine forever" with the help of the Internet. The so-called "DNA revolution'(133) offer people a longer and healthier life. In this example, a longer and healthier life for all people can be taken as Utopia while genetic biology and communication technology can be described as the means to accomplish the result. Yet the global, popular participation of the minor ethnic groups plays the key role in the overall change. As they announce in the following words:

> We can't do it without your help. We need hundreds of thousands of volunteers to fill out a health survey and thousands who match a specific profile to donate a sample of their blood. From there we can begin to understand the true relationship between genetics and disease. If you're interested in joining us, click the button below to register.(134)

This quote openly underlines the importance for the need for global human interaction with a large global community as diverse as possible. In this context, the Internet seems to be a good alternative to all other one-way media. But, of course, the Internet has its own technical limits.

I argue that, today the concept of the World Wide Web (WWW) is a Utopia itself because, as a critical approach, it has not been fully established yet. The Web of information is most commonly used at the certain parts of the world and by certain groups of people and the dominant language is definitely English.(135) So currently WWW is still not a World Wide but an incomplete World Wide Web. And without an appropriate two-way network, we can not accomplish certain tasks, for example this genome project.

The same limitation is true for the Internet in terms of universal access. The Internet is a specific term for an international network and for closed systems Intranet is a more proper name. When we limit the participation of the other users to the large network, for example by creating a new cable system or broadband structure, we may no longer talk about a global Internet but a large national Intranet connected to the Internet. It is sad but true that today, as the mergers of AOL Time Warner, Microsoft and NBC indicate, the industry is leading to broadband, further isolating the rest of the world. (136)

Castells, in his book Network Society, wrote about this global media network in relation with global capitalism.(137) Like the nature of this analogue media network, globalism today is constructed on an imbalance, an unfair, one way flow of information, goods and services. This imbalance not only makes the difference between the parties wider but it also effects the future of all the people living on our planet negatively. In terms of communication, an Interactive two-way media might be more helpful than analogue one-way broadcasting media. Hence a world wide, interactive, information based, free network, designed for sharing knowledge can challenge the nature of our media society.(138) This new network,

a restructured WWW, not only creates an alternative to the cultural imperialism but also threatens the materialist consumer culture. Still the question is how can we really talk about re-establishing a new World Wide Web and how can we sustain it?

Unlike DNA, HTML does not contain the information necessary for its survival. DNA is self-extracting and it has the coded information to build its hardware from the software. It contains the information of self-reproduction and other skills to survival and expansion but HTML for the moment does not carry that information. So, to increase the communication, it's the people who need to build this network. The access as a problem is not only technical but also social.

To talk about a World Wide Web we really need to have a global network of at least of telephone lines or satellite connections.(139) These lines should be connected to computers and servers and Dyson proposes use of the sunlight to provide the energy in distant areas (140) So establishing the hardware is the first part. But the miracle of the Internet comes with interaction. In this case we need at least basic levels of education other than hardware, to make people interact, create and share information with each other.

The most important advantage of the Internet from the other media is its capacity for interaction together with a content production capacity. It is these new personal, individual contents that add up to the total knowledge humanity has acquired through the centuries. The issue of copyright and commercialization of knowledge is an important challenge in front of this software barrier. The new technologies provide certain solutions to these problems. For example, the first commercial browser, Netscape's Communicator become so successful not only because it was technically improved and free but also it contained a Composer which let people create and publish their own content. Netscape became the most popular browser and therefore second most popular software after Microsoft Word, in mid 90's. Microsoft took this development as a threat to it hegemony and purchased the previous browser Mosaic and re launched it as Microsoft Internet Explorer. (141)

Netscape was a threat to Microsoft as the Composer could be used as a text editor hence it was a great challenge to the commercial text editing Office monopoly of

Microsoft. The software monopoly did everything to stop Netscape, even forced its users to have it by embedding the browser Internet Explorer (IE) into the Windows program. In this regard, the approach of the Microsoft to the developments in communications technology was not revolutionary as Bill Gates argued but it was counter-revolutionary.(142)

The notion of copyright and peoples' right to copy creates the core of the discussion of individual rights for freedom of expression on the net. The copyright issue is not only limited to the creation of content but also about the content itself. The question can further opened into; who owns the rights of information on the web and to what extent? In a communication forum at MIT Media Lab (143) on "Copyright and Globalization In the Age of Computer Networks" Richard Stallman said that:

> Copyright developed in the age of the printing press, and was designed to fit well with the system of centralized copying imposed by the printing press. But the copyright system does not fit well with computer networks, and only Draconian punishments can enforce it... What needs to be done is either to reduce copyright powers or effectively eliminate them, depending on the kind of work. Governments must now protect the public's right to copy. (144)

The statement above shows that the technology itself, as the concept of digital, contradicts with the current situation of the consumer society. So this change will eventually lead us to institutional changes. But the institutions themselves also need to try to contribute to this process. In this regards the declaration of MIT President Charles M. Vest is very important. He has announced that, "the Massachusetts Institute of Technology will make the materials for nearly all its courses freely available on the Internet over the next ten years".(145) This unprecedented step is a bold to challenge the 'privatization of knowledge'. For an overall radical change, we need to consider having a global redistributional welfare project to establish the global two-way network and bring an end to the digital divide. And if we do not aim to create such a network, we should not use the term WWW. The Internet is still a useful medium to express this discontent but I argue that it is not the change itself. To make post-modernism history we need to clearly define our own utopias. And we

should keep on demanding global liberty and global democracy for all. Thanks to the technology, we have the right tools for this right now...

Conclusion:

Right at the turn of the second millenium, the use of the term digital revolution in popular publications' is a catch phrase -if not a fraud- and its symbolic references lack any solid background. Though the printing press use the phrase widely they never discuss the concepts of new media in depth. I argue that this is the result of a global depoliticization process if not a future strategy.

As long as the digital revolution remains a catch phrase in this context with no specific referent, no serious discussion of the concept can take place. It is with the need to first understand the concept of digital revolution in mind that I present my case by de-constructing the phrase into its parts and studying the terms "digital" and "revolution" separately with an interdisciplinary approach. As the individual words of

the phrase of the digital revolution are concerned, the term revolution as used in popular publications continues to refer to technological change as a new phase of Industrial Revolution but all the references lack the social reflections of the progress. Reference to political history is made in the visual iconography but is never discussed properly. Whether we follow a Western progressivist approach or not, the new communication technologies bring changes with possible effects on society. But as these social consequences are simply ignored the term revolution remains as a simulation for change.

My analysis of the term 'digital' demonstrates that the new communication technologies provide us with the infrastructure for radical change especially in terms of information related materials. Stil the technical conditions set the limits for this global development. It is the current materialist consumer society that restricts a radical shift. More specifically, free global information exchange on the WWW can bring a change. It might help to provide the humanity a better life on our planet. Still, today we can not really talk about a complete WWW but an incomplete one, because of the imbalance of the global infrastructure of the communication network. To create a true WWW we do not only need to establish the material infrastructure of a global network but we need to consider a global redistribution project to attain the goal.

It is true that today there is a global network of consumer society with global brands and credit cards. But this network is not a two way, interactive network. It is simply a one-way analogue network for the flow of consumer culture and in exchange for cheap labor and poverty. Today we cannot really talk about an efficient global information exchange but a new form of media imperialism if not an e-post colonialism. If we cannot exchange and share information freely we got stuck in the vicious circle of the post-post-modern society. Hence today we cannot talk about a radical change such as a digital revolution and we cannot talk about a turn of history, such as a digital era that comes after post modernism. In this regard we realize that the true meaning of the terms digital, revolution, Utopia and digital revolution are merged into each other. The re-contextualization of these terms term became the utopia itself.

Appendix:

a) The Representation Problem on the Web: On-line Presence versus Web Presentation, The case of http://www.moma.org

Barbara London* is interviewed by Genco Gulan At Museum of Modern Art, May 2000.

We met with Barbara London at MoMA's office building. Her room was full of videos and images and the walls were covered from the floor to the ceiling. In between all those images I remember a Michael Jackson poster. We had set a thirty minute appointment with Ms London so I immediately began asking questions. My questions mostly referred to the MoMA web site and I tried to clarify the terminology.

As we have discussed via e-mail, I was working on the representation problem of the web hence MoMA's site was a good example for my study. It contained both online projects and web presentation of the MoMA collection. Again Barbara London was a

good choice because she curates on site video exhibitions and she works on on-line representations for her research.

My first question was about the definition she used on the dot.jp site "media art". I basically asked what she means with that term. She answered that, she did not like the term "new media" but she used the term "media art" to refer to a broad range of electronic arts. She explained in detail by giving examples from the Japanese artists. In the "Sayonara" section of the dot.jp on page one, she wrote that; "This generation of artists has turned the old McLuhan adage that "the medium is the message" right on its head, because the new message is: "the medium is irrelevant."
Then I jumped to the term "revolution" which I tried to build this essay on. I reminded her that she had used the term revolution in her article on the dot.jp at the "Sayonara" section but she said that she used the term for the specific case of Japan and not for the overall media art.

She basically said that, she was referring to the evolution of the electronic arts in Japan and its effects on the conservative or hierarchical Japanese cast system. She argued that with the new change the artists have more freedom for self-expression. It was interesting because she used the term hierarchy twice: First to describe the old Japanese cast system then when describing MoMA's bureaucratic structure, while she was trying to explain why they do not have a department for "new media".

Again in the Sayonara section on page four, she wrote that; "Media art is simply too dynamic to be slowed by institutional inertia." When I asked about what she thinks about "web art," she said that, like video and performance had experienced an undefined emergence period so does the web art. It was an exciting time then and it is now for web art. She said that they have lived through such moments in the history of performance art that for example "they (the performers) were coming to the lobby of MoMA and spitting blood on the floor." I jump back to the top of the MoMA site and ask about the web representations.

Under the title of 'on line projects' it was written: "This page presents diverse sub sites that were created or co-produced for moma.org. These projects explore some of the properties and possibilities of the Web, such as interactivity, motion and sound."

She explained that the MoMA site has multiple functions, one of which is the public relations. And they were using the site more heavily for this purpose About the online projects she told me that MoMA had not just purchased any online project but MoMA had commissioned web projects like they commissioned any new installation. She explains the reason was that "it was hard to purchase a web site because of the representation problems." If you simply change a site's address or bring it to the MoMa server or just record the site to a zip, the notion changes.

Then we move to collections that are listed in the MoMA's site. I asked; "although the site contains many online projects they're not included under the title 'collections.' She answered simply; "because the collections are composed of collectibles while it is not so easy for web projects." To conclude, I can say that it is this stage of flux that brings to the web-art its dynamism.

*Barbara London, Associate Curator, Department of Film and Video, Museum of Modern Art, New York, NY.

b) The Virtual Museum:

Genco Gülan talks with Mehmet Sinan from Istanbul Contemporary Art Museum (iS.CaM)

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<!doctype html public "-//w3c//dtd html 4.0 transitional//en"> <html>
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<meta name="Generator" content="Microsoft Word 97">
<metaname='Template"content="C:\PROGRA~1\M[CROS~1\Office\html.dot">
<meta name="GENERATOR" content="Mozilla/4.7 [en] (WinNT; I) [Netscape]">
</head>
<body link="blue" vlink="purple" background="../images/bgcolor2.gif"> <p><font color="#FF0000"
face="Arial, Helvetica, sans-serif">Istanbul Contemporary

Art Museum/ Istanbul Cagdas Sanat Muzesi/1998-2000 The Virtual
Museum
 Genco Gulan* talks with Mehmet Sinan
 <blockquote>
Mehmet Sinan is the founding Director
of New Media
 <\>\n\i\alwes atthe Istanbul Contemporary NX Museum
<f\>
 where he is responsible for curating the on-tine
 <\>Gaiterie
http://www.istanbufmuseum.org . fn
 addition to initiating one of the eartiest
 archive collections of
net art, the Istanbul Museum's
Odigitat art collection, Sinan has curated the on-line</'»
exhibitions. He lectures and writes extensivefy
about new media and he is currently organizing "ArtFest"
which is scheduled to open in May, 2000. </blockquote>
<pxfont color="#003366" face=nArial, Helvetica, sans-serif 1>-Genco Gulan: What does it mean to be the curator of
New Media at the Istanbul Contemporary Art Museum?
-Mehmet Sinan: My official title is Director of New
Media Initiatives, and one of the interesting things
 about it is that it reflects the multiple functions of
 new media and the Internet have in many museums today.
 Our department has
many functions, from providing
 on-line information on what's happening in the museum
 to looking at the net as a creative medium itself.
 Obviously, it's in the latter role that we start
getting at more interesting topics, but I think it
 also reflects the fact that we take the idea of the
 initiative literally. We created the gallery so that
 we could commission Internet and new media art.
 -GG: How are you approaching the task of commissioning
work?
-MS: A lot of museums step into it by approaching an
 artist they have been working

with and saying "Would
 you like to do something for us on the net?" Our
 mission at the Istanbul Contemporary Art Museum (iS CaM) and
 the new media initiative is to be a catalyst for
 artistic expression. What I think is different about
 how we conceive of the Gallery is that we're trying to
 approach artists who work with the Internet as their
 primary medium. We're certainly not against going to
 an artist we have worked with before, but we're less
 interested in approaching well established artists.
 We're trying to find artists who are already working
 with the Internet in different contexts.
 -GG: If these artists are already doing net projects,
 why bring them to the iS.CaM? What advantages can a net
 artist have at a museum?
-MS: One of the things, artists legitimately ask is
 what can a museum do in an Internet context? To some
 extent, they don't really need museums to mediate
 their projects. On the other hand, one thing a museum
 can do is bring a different audience and, potentially,
 a different level of attention to artists who aren't
 well known even in the context of the art world. By
 having the iS.CaM saying you should look at the work of
 so and so, we can be a catalyst for creative
 experimentation and expression.
-GG: What relation do you see evolving between museums
 and the Internet?
-MS; In a broader view, it's interesting to note that
 people working with new media see it from where they
 are coming from. People coming from video look at it,
 in a different way than someone coming at it from
 photography or publishing. It just becomes yourframe
of reference because the medium is so malleable. I
 think the museum can bring these different
 perspectives together. For me, there are all sorts of
 parallels between artists getting on-line and doing
 their sites and the self publishing movement in the
60s and 70s. It makes perfect sense. Someone who came
 up from the video world had to go to festivals before
 they could look at them. That colors how and what<t>r> they do. I'm leaning

toward the idea that the net will
 be increasingly influential and I think that it will
 be a parallel universe of our activity. Sometimes it
 will be more autonomous, and sometimes it
will
 intersect more with the physical institution of the
 museum.
-GG: It sounds like you're saying the net is a medium
 onto itself. Now, it's true that every medium develops
 its own language over time. For instance, Eisensteinâs
 montage became the dominant language of film, and
 eclipsed more theatrical or even avantgarde<
br> languages. Do you feel like you've identified one or
 two parallels in net art to what montage was to film?
 -MS: I think one big question regarding the net art is
whether or not it can have the kind of impact on
 artists that, let's say montage had on film. Will
it
 become more avant-garde or more mainstream? It gets
 confusing quickly and I think we have to start off
 with the idea that it's a meta medium. The best
 analogue to the net,
to my mind, is electricity.
 Electricity is everywhere. Sometimes it turns on your
 television
and sometimes it turns on a David
 sculpture. Those are very different things. On the
 Internet, we sometimes confuse the transmission of
 information with the creation of a work, of a practice
 or of an event. But we can also bring the same kind of
 analytical tools to both. Once you distinguish the
 fundamentally different ways this thing called the
 network is being used, then you start down a road
 towards a language like Eisensteinâs montage.
And I
 think it will be developed by artists and other
 practitioners. On the other hand, because
there's
 still this other electricity like ubiquity to the net,
 I think there'll always be this cross back and forth
 between design worlds, art worlds, publishing worlds
 etc., so the parallel between a cinematic language and
 the development of a net language won't be so neat.
 It'll be far more embedded in the worlds of
advertising and commerce. <
b>- GG: Did you see my video on Eisenstein's "Battle Ship Potemkin"?

- MS: Is it the fast forwarded one? - GG: Yes· <pxfont color=fl#003366"face="Arial, Helvetica, sans-serif">- MS: No, I havent seen yet.

   *Genco Gulan is an artist living in New York. <hr>

 This dialogue is a virtual dialogue.
For the referred text, see Flash Art Jan-Feb 2000, page: 56, The
 Virtual Museum, Saul Anton talks with Steve Dietz.
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   </body> <htmf>

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Footnotes:

1) Online art events created by Evgenia Demnievska and Wolfgang Zimmer, 1997 - 1998. The web site was at this address: http://koeln.heimat.de. The first project is called; Chaos in Action and the second project is called; Euronyme's Gambit.

2) A street poster by NYC & Company. Sponsored by Double Click. The streets of the New York City has been decorated with these flags to celebrate the so called "Digital Revolution". New York never become a technology capital but it was the home for the Media and Finance sectors that pumped the excitement. May 2000.

3) Dyson, Esther, Gilder, George, Keyworth, George and Toffler, Alvin. "Cyberspace and the American
Dream: A Magna Carta for the Knowledge Age" Release 1.2, August 22, 1994. The Progress and Freedom Foundation, http://www.pff.org/position.html

4) Forbes ASAP, Business Beyond Digital Revolution. A Forbes magazine Supplementary. February 21, 2000.

5) See Figure 1.

6) Ibid.

7) Pfeiffer, Eric W. "Where are we in the Revolution? Experimentation and Capitalisation". Forbes ASAP, Business Beyond Digital Revolution. A Forbes Supplementary. February 21, 2000.

8) "Capitalism served daily". A billboard on 23rd Street and 5th Avenue, Fall 2000.

9) Forbes ASAP. February 21, 2000.

10) For example sec; "The Digital Revolution: Art in the Computer Age" by Cynthia Goodman at Art Journal, Fall 1990, p.248. In relation with the Internet see: "State of the Art" by Daniel Pinchbeck, Wired magazine Dec. 1994.

11) Additionally, there is a minimum of 14,800 up to 53,500 pages containing the phrase.

12) Barnes and Noble book store, Union Square, New York, Spring 2000.

13) Whitney, Gretchen, editor. Published for the American Society for Information Science by Information Today, Inc. Medford, New Jersey 1996. P:xi

14) "...I would maintain that the digital has a similar function (of modem) as a place holder for whatever term we or posterity chooses to describe our immediate

present." Lunenfeld, Peter. "The Digital Dialectic. New Essays on New Media." MIT Press 1999. Pp. XVI .

15) Roland Schaer, Gregory Claeys, and Lyman Tower Sargent (eds.). Utopia. The Search for Ideal Society in the Western World. The New York Public Library/ Oxford University Press. New
York, Oxford 2000.

16) As for the sources of Utopia, this carefully designed book Utopia. The Search for Ideal Society in the Western World, referred to two of the three religions that emerged from the Near East at similar times, Christianity and Judaism but not Islam. This choice simply reflects to their projection of a new Utopia. Ibid. Pp. 35-95. (This might have led to problems in the future)

17) "Dyson, Freeman J. The Sun, the Genome and the Internet. Tools of Scientific Revolutions, The New York Public Library and Oxford University Press. New York 1999. pp. 47-48.

18) The Matrix, 1999, Warner Bros., 136 min. Directors; Larry and Andy Wachowski. Neo (Keanu Reeves) learns that the universe is controlled by computers, not humans—he and his fellow men are mere batteries to provide bioelectrical energy—and he isn't even living in 1999 as he believes, but hundreds of years later. When revolutionary girl (Laurence Fishburne) opens Reeves' eyes, the reluctant hero leads a revolt (with help from Carrie-Anne Moss and others) against the powers that be. Working from influences including Blade Runner, Videodrome and assorted Hong Kong action movies, the Wachowski brothers have created a science fiction landmark.

19) The End of History and the Last Man is a 1992 book by Francis Fukuyama, expanding on his
1989 essay "The End of History?", published in the international affairs journal The National Interest.

20) Emphasis added. Time magazine. October 23, 2000. P.66.

21) Comment added. Time magazine. October 23, 2000. P.67

22) Castells, Manuel. The Rise of the Network Society. Volume 1, 1996.

23) Lewis Mumford. Technics and Civilization. San Diego; New York; London: Harcourt Brace & Company, 1934, 3.

24) Ibid.

25) See Mark Stahlman; The English Ideology and WIRED Magazine, 1997. http://www.culturewars.
com/CulturcWars/Archives/cwrecent/Wired.html
26) Barbrook, Richard and Cameron, Andy "The Californian Ideology". http://www.dds.nl/~n5m/texts/barbrook.htm
27) Louis Rossetto, "Response to the Californian Ideology". http://media.wmin.ac.uk/HRC/ci/calif2.html
28) White, Keith. "The Killer App; Wired Magazine, Voice of the Corporate Revolution". Commodify Your Dissent: The Business of Culture in the New Gilded Age. Edited by Thomas Frank and Matt Weiland. Baffler Inc. Pp: 49
29) "'Whitney, Gretchen, editor. "The Digital Revolution, AS IS Mid-Year Meeting. Published for the American Society for Information Science by Information Today, Inc. Medford, New Jersey 1996. P: xi
30) As she continues: ...in terms of population groups this is true: young as well as old, men as well as women, any ethnic or national group you can name. No employment category (nor the unemployed) will be left out: academics, clergy, police, architects, sales clerks. But parts of these
groups will be left out: and the distance between them is widening. Ibid. "
31) Ibid.
32) Ibid.
33) As Negroponte continues; "It (digital revolution) has four very powerful qualities that will result in its ultimate triumph: decentralizing, globalizing, harmonizing, and empowering. Negroponte, Nicholas. Futurist November - December 1995. P. 68
34) For example, Revolutionary Worker. Voice of the Revolutionary Communist Party. USA. No: I 100. May 1, 2001.
35) I made a simple search in a Barnes and Noble Book store and I found two magazines that carry the title Revolution. The first one was in the business section together with Forbes ASAP Magazine and Darwin. The other one was in the music section. Both of the revolution magazines were referring to new technologies and none of them was referring to social issues. Barnes and Noble book store, Union Square, New York, Spring 2000.
36) Revolution magazine. New York, NY, 2000.
37) The magazine Darwin subtitled; "Business Evolving in the Information Age", 2000. New York, NY.

38) Time. October 2, 2000.

39) Time. October 2, 2000. P.68

40) Greenfeld,2000, p. 62.

41) The word "devrim" in Turkish have quite parallel meanings with its English version of revolution. It simply means radical change. But the roots of the word goes to evrim as evolution, and devr as a time period or tour around and again, devir as to over throw a power source.

42) The books carrying the title "History of Turkish Revolution" (Türk Devrim Tarihi) were replaced with almost the same book which does not carry the term revolution in its title; "History of Turkish Renovation" (Turk İnklap Tarihi). Milli Egitim Bakanligi Yayinlari 1983.

43) After the overthrown of the Ottoman Empire and establishment of the Turkish Republic in 1923, the iciety had began to experience economical, social, cultural, political changes which arc also called wlution in Kemalist Ideology. For more info see Genco Gülan http://rpp.virtualavc.net

44) Fukuyama, Francis. "End of History". http://www.marxists.org/refercnce/subject/philosophy/works/us/fukuyama.htm (introduction) 1992.

45) Poster, Mark. "Cyber Democracy: Internet and the Public Sphere". University of California, Irvine 95. http://www.humanitics.uci.edu/mposter/writings/democ.html

46) Jameson, Fredric. The Political Unconscious. Narrative as a Socially Symbolic Act.(Ithaca, New York: nidi University Press, 1981), 9

47) For information on Copernicus see, http://es.rice.edij/ES/humsoc/Galileo/Things/copemicansystem.html

48) McGeady, Steve. "The Digital Reformation". The Harvard Conference on the Internet and the Society. Edited by O'Reilly Associates. Harvard University Press, J996, pp, 59-65.

49) " Popular intervention which provoked the sudden collapse of the social system of the Old Regime (in France) issued from progressive mobilization of the masses..." Lefebure, George. "French Revolution, from its origins to 1793." Translated by Elizabeth Moss Evans. Columbia University Press 1962.

50) Ibid.

51) Originally in French liberte, egalite and fraternite.

52) "Free man & slave, patrician & plebeian, lord & serf, guild master & journey man, in a world oppressor and oppressed, stood in constant opposition to one another carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary re-constitution of society at large, or in the common ruin of the contending classes." Karl Marx & Friedrich Engels. "The Communist Manifesto" Introduction by Vladimir Pozner. Bantam Books, June 1992. Reproduced from the original text edited by Friedrich Engels in 1888.

53) Johnson, Chalmers. Revolutionary Change (Boston: Little Brown & Company, 1966), I. To prove his arguments, Johnson refers to Lenin's words: "Socialism is opposed to violence against nations...however no one has yet drawn the conclusion from this that socialism is opposed to revolutionary violence. Also e: Lenin. Selected Works.(New York: International Publishers, 1934-1938), VII, 175. Emphasis added.

54) Richard Barbrook and Andy Cameron . "The Californian Ideology." http://media.wmin.ac.uk/HRC/ci/calif2.html

55) Ibid

56) Mark Stahlman, "The English Ideology and WIRED Magazine" http://://www.rewired.com/96/Fall/I 118.html, 1996.

57) Ibid.

58) Rossetto, Louis. "Response to Californian Ideology." http://media.wmin.ac.uk/HRC/ci/calif2.html

59) Ibid.

60) Poster, Mark. "Cyber Democracy: Internet and the Public Sphere". University of California, Irvine 1995. http://www.humanitics.uci.edu/mposter/writings/democ.html

61) Gates, Bill. 1996, p.27

62) "...The first (Industrial Revolution) started in the last third of the eighteenth century, characterized by new technologies such as the steam engine, the spinning jenny, the Cort's process in metallurgy, and, more broadly, by the replacement of the hand-tools by machines; the second one, about 100 years later, featured development of electricity, the internal combustion engine, sciencebased chemicals, efficient steel casting, and the beginning of communication technologies, with the diffusion of the telegraph and the invention of the telephone." Castells, 1996.

63) Ibid.

64 Castells 1996.

65 'Castells, 1996. Also see Hall and Preston (1988); Sxby (1990): Dizard (1982); Forester (1985)

66) The three orders of simulation, parallel to the mutations in the law of value, have succeeded one another since the Renaissance: a) Counterfeit is the dominant scheme of the "classical" epoch, from the Renaissance to the industrial revolution. b) Production is the dominant scheme of the industrial era. c) Simulation is the dominant scheme of the present phase of history, governed by the code. Simulacra of the first order play on the natural law of value; those of the second order play on the commodity law of value; and those of the third order play on the structural law of the value." Baudrillard, Jean, Selected Writings". Edited by Mark Poster. Stanford University Press, Stanford, California, 1988. Pp. 135.

67) Digital magazine, a Time magazine supplement. October 2000. Currently the magazine is being published as On magazine. Still, some of the previous issues with the previous title are available online.

68) 'Lunenfeld, Peter. "The Digital Dialectic. New Essays on New Media." MIT Press, 1999. Pp. XVI

69) "Digital 2000 Buyer's Guide. Find just the right gadget, stuff it into somebody's stocking, and you could come a holiday hero". Time Digital, January/ February 200 Vol. 5 No. 9

70) The "digital" magazine is a total of 104 pages, including the cover and back cover pages. A total of 36 pages are used for advertisements that make more than one third of the magazine. Plus there are product promotions on roughly 17 pages, which bring us to the total of 53 pages, which makes almost more than half of the magazine. If we calculate the table of contents and the listings at the back we can make a guess about the real amount of visual and written editorial content.

71) "Frank, Thomas and Weiland, Matt (eds.). " Commodity Your Dissent: The Business of Culture in the New Gilded Age. Salvos from the Baffler. Baffler Inc. W.W. Norton & Company, New York, London, 1997,49

72) Ibid.

73) In an interview Abraham Lubelski, the publisher of NY Arts Magazine told me that he wanted to move to magazine totally to the Internet because of the high cost of the paperback print but the advertisers still do not have the trust to the magazines that are being published on WWW as an advertisement medium, May 2000 NYC.

74) Nicholas Negroponte, Futurist 11,12 1995.

75) "Lunenfeld, Peter. "The Digital Dialectic. New Essays on New Media." MIT Press, 1999. Pp. XVI

76) Nicholas Negroponte, Futurist 11,12 1995,

77) Ifrah, Georges. "The Universal History of Numbers. From Prehistory to invention of the Computer." JohnWiley & Sons Inc. 2000. Pp.59

78) "The death of the prophet Omar had left such a big space in [slam world that three mountains can not fill." Ifrah, 2000, 58

79) Negroponte uses the term bits to explain the smallest unit in computing and compares it with digits: "A bit has no color, size, weight, and it can travel at the speed of light. It is the smallest atomic element in the DNA of information. It is a state of being: on or off, true or false, up or down, in or out, black or white. For practical purposes we consider a bit to be a 1 or 0." 1995, 14.

80) Edu Morales and Crystal Harris. "History of Artificial Intelligence". http://web.tnit.edu/STS001/www/Tcam7/computcrs.html

81) Edwards, Paul N. "The Closed World. Computers and the Politics of Discourse in Cold War America." MIT 1996. Pp.1

82) Popularly journalists refer these turning points as revolutions. For example John Markoff, a NY Times writer argued that; "I look at the current revolution from the point of view of the integrated circuit, not the PC or Internet". Forbes ASAP, February 2000.

83) Johnson, Steven, Interface Culture: How New Technology Transforms the Way We Create and Communicate, (New York: Basic Books, 1997), 25.

84) In terms of virtual machines, software replaces the function of a tool, which was previously used as a separate, independent tool. A simple example is the replacement of a fax machine with a fax tool in computers.

85) Johnson, Steven, Interface Culture: How New Technology Transforms the Way We Create and Communicate, (New York: Basic Books, 1997), 20.

86) Negroponte. p: 18

87) For example I am writing these words on a PC and if you have a Mac you need special software from a specific year to communicate the information. So although we are talking about bits and digits, the processing this information is totally a different story. Compatibility is a very important issue even within the same brand.

88) Lunenfeld, Peter. The Digital Dialectic. New Essays on New Media. MIT 1999. Pp. XIX 89) Castells, 1996, 477.

90) "Technologically determined effects derive from a broad set of assumptions in which what is technological is a configuration of materials that effect other materials and the relation between the technology and human beings is external, that is, where human beings arc understood to manipulate the materials for ends that they impose upon the technology from a pre constituted position of subjectivity. But what the Internet technology imposes is a dematerialization of communication and in many of its aspects a transformation of the subject position of the individual who engages within it". Poster, 1995.

91) "Cyberspace and the American Dream: A Magna Carta for the Knowledge Age" by Esther Dyson, George Gilder, George Keyworfh, and Alvin Toffler. Release 1.2, August 22, 1994.
http://www.pff.org/position.html

92) http://www.moma.org

93) "Representation Problem on the Web. Genco Gülan interviews Barbara London". New York Arts Magazine. May 2000.

94) Ibid.

95) http://koeln.heimat.de/

96) For example, "Five eyed Hand" by Genco Gülan, Digital Image, 1997, http://kodn.heimat.de/chaosl/cspace/objckte/obj_176.html

97) See, Metropolitan Museum's web site at http://www.metmuseum.org/ "

98) http://istanbulmuseum.org

99) As an example for virtual museums also see http://alternativemuseum.org . The importance of this institution is that it has closed its physical exhibition spaces in 2000 and began exhibiting art work only on the web.

100) Special thanks Google search engine, http://google.com

101) Turkle, Sherry. Life of the Screen: Identity in the Age of Internet. NY: Touchstone, 1995, 9-16.

102) There are business magazines with the title and sub titles of Digital, Revolution and Digital Revolution; there is no magazine with the title Utopia. Barnes & Noble, Union Square, NY, NY 2000.

I03) Negroponte, 1995.

104) Ali Akay, 2000.

105) Naomi Klein. Nation Company, NY. Jul 10, 2000.

106) Beuys, Joseph. "We are the Revolution" (La Rivoluzione Siamo Noi), 1972. Silk screen on polyester with handwritten text.
107) Richard Barbrook and Andy Cameron . "The Californian Ideology." http://media.wmin.ac.uk/HRC/ci/calif5.html
108) e-company magazine, article by: Don Tapscott, David Ticoll, Alex Lowy http://www,ecompany.com/articles/mag/0,1640,8850,00.html December 2000 Issue, online & paperback.
109) Ibid.
110) http://www.time.com/timc/poy2000/archive/ 1999.html
111) See, http://forbes.com
112) See; "Post-modernism" and Photoshop in "Avant-Garde as Software" by Lev Manovich tp://www.crac.org/htmls/levavant.htrnl
113) Smolan, Rick and Erwitt, Jennifer (eds). 24 Hours in Cyberspace. Published by QUE Macmillan publishing. Produced by Against All Odds Production. 1996
114) Fisher, Eugene. Ibid, 1.
115) Despite the growing pains, the Internet is already (emphasis added) more representative of our global diversity and more important to our collective future than the passive medium of television." Paul Saffo. In "Preface", Ibid. p. 17
116) See, Colors magazine, http://www.benetton.com/colors
117) Saffo, 1996, 17
118) "... 150 professional photographers across the globe to photograph and tell pictorial stones about how the Internet is chancing peoples' lives." And "all the photographers used Kodak slide fdm to capture images." ibid. 208.
119) Habermas, Jurgen. Communication and the Evolution of Society. Translated by Thomas Mc- Carthy. (German Texts: Sprachpragmatik und Philosophie and Zur Reconstruction des Historishen Materialismus) Frankfurt am Main: Suhrkamp Fcrlag, 1976. In English by Boston: Beacon Press 1976.
120) Ibid, 209.
121) 'Fisher and Wright, 2001. http://www.ascusc.org/jcmc/vol6/issue2/fisher.html
122) In the words of Judge Marilyn Hall Patel, "essentially a program to facilitate the downloading and uploading of music . . . pirating be damned is the sense one gets" Grimaldi, 2000, p. A01
123) Ogburn 1964.
I24) Greenfeld, 2000, p.62

125) Grimaldi, 2000, p. A01

126) Digital magazine, May 2000.

127) http://www.linuxresources.com

128) Over 32 million people have downloaded Napster in one year. See, www.napster.com

129) Fukuyama, Francis. "End of History". http://www.marxists.org/reference/subjcct/philosophy/works/us/fukayama.htm (introduction) 1992.

130) See, for example http://www.vote.com

131) Also see, "great crisis" Boyer, 1986, pp. 226-34, "a crisis of form" (Alvater, 1991), "a crisis of paradigm" (Dierkes, 1997, pp. 47-48), a "crisis of working society" (Offe, 1984, p.7), and a "crisis organised modernism" (Wagner, 1995)

132) http://www.polisci.wisc.edU/users/fioretos/articles/OECD/I 99821 stCTech.pdf

133) Time magazine. February 19, 2001.

134) Note added. http://www.dna.org

135) The Internet users: 1999 World total 172.25 M, Africa 1.14 M, Asia Pacific 27 M, Europe 40 Million, Middle East 0.88 Million, Canada & USA 92 Million, South America 5.3 Million. London, October 27, 1999 -Commerce Net, the world's largest e commerce Consortium and Nielsen Media Research.

136) For a dicussion see The Digital Beat, Vol. 1, No. 14, 20 August 1999. By Veronica L. Breckheimer and Kevin Taglang. http://www.benton.org/DigitalBeat/db082099.html

137) Castells, 1996. p. 34

138) Habermas, Jurgen. Communication and the Evolution of Society. Trans. Thomas McCarthy. Beacon Press, Boston, 1979.German Texts: Sprachpragmatik und Phiiosophie and Zur Rekonstruktion des Historischen Materialismus. !976 by Suhrkamp Verlag, Frankfurt am Main.

139) Dyson, 1996.

140) Ibid.

141) For information on browsers see browser watch web site of jnternet.com : http://browserwatch.intemet.com/newslctter/BW-012301.htm

142) Gates, 1997.

143) "Copyright and Globalization In the Age of Computer Networks "Conference April 19, 2001. Bartos Theatre MIT Media Lab. Also see, http://www.mit.edu

144) ibid.

145) http://www.mit.edu/ April 4, 2001.

Özel Baskı için Son Söz

İngilizce bir kitapta Türkçe son söz görmek alışılageldik bir durum değildir. Fakat ben şahsen çok dilliliğin bir zenginlik olduğunu düşünüyorum. Dolayısı ile kitabın özel baskısına böylesi bir sürpriz eklemeye karar verdim. Zaten üzerinde çalıştığım en son kitabım *A Portrait of an As the Young Man*'de de böylesi küçük bir oyun yapmıştım. O kitabın aksine, elinizde tuttuğunuz kitap çeviri meselesi üzerine değil fakat 'dijital devrim' olasılığı üzerine yazılmıştır. Dolayısı ile becerikli ve meraklı bir okuyucunun gerekirse birkaç yazılım ile çeviri işini halledebileceğini biliyorum.

Dijital Devrimin Yeniden Kodlanmasını meselesini tam milenyum dönüşünde araştırmaya ve yazmaya başladım. İnsanlar yeni keşfedilen ve hızla popülerleşen iletişim teknolojilerine –aynen yüzyıl öncesinde olduğu gibi- dünyaya yaklaşan bir kuyruklu yıldız edasıyla bakıyorlardı. Heyecan doruktaydı…

İşte o yeni parlak yıldız dünyaya çaptı mı? Çarptı. Bütün dünyayı değiştirdi mi? Evet, kesinlikle. Buna bir devrim diyebilir miyiz? Hayır, hayır, hayır, hayır ki hayır! O gün de hayır demiştim, bu gün de, diyorum. Yani yaklaşık 20 yıl sonra yine ısrarla bu soruya hayır diye yazabiliyorum çünkü dinozorlar hala yaşıyorlar. Toplumsal ilişkiler ve sınıf yapısı değişmedi. Modernizm değil ama Kapitalizm ve post post-modernizm hala devam ediyor. Ufukta da bir değişim olasılığı görünmüyor.

Yirmi bir, hatta yirmi iki sene evvel bu olası dönüşüm konusunu yazmaya başladığımda daha bir el yordamı ile ilerliyordum, ilerliyorduk. Yüksek Lisans tezimi yazarken, yani hemen bir iki sene içinde, konu biraz daha somutlaştı, belirginleşti. Sabun köpüğü söylemleri borsaya da yansıdı. Bir süre sonra New York'ta tereciye tere satar hale gelmişken 11 Eylül yaşandı ve Türkiye'ye dönmek zorunda kaldık. İstanbul'a döndüğümde şehre Fransız kaldığımı fark ettim, tam bir English Man in New York durum vaziyetine düşmüştüm. Okuduğunuz bu son sözü yazmamın iki amacı var birincisi Tezimi basma veya basamama hikâyem. İkincisi de arka kapağı düzenlerken bulduğum yeni bir final olasılığı!

İstanbul'da kitap yayınlamanın zor ve hatta daha açık söyleyelim imkânsıza yakın zorlukta olduğunu belirterek başlamama lütfen izin verin. Ben de bunu ilk tezim olan CHP'nin süreklilik ve Değişim'i yayınlamaya çalışırken zaten öğrenmiştim. İkinci kitabımda ise yine, büyük bir kayayı dağın tepesine çıkartmak zorunda olan Sisifos gibi, yine biçare kitap yayınlama denemelerine giriştim. Çeviriyi de kendim yaptırdım. Ama 2000lerin başında yayınevlerinden aldığım cevap daha ilginçti: "Bu kitabı hangisinin yanına koyacağız?"

Yayınevi arayışım bir süre sonra umutsuz bir sürece dönüşünce pes ettim ve kendimi hayatın akışına bıraktım, ta ki bir gün e-postama ilginç bir teklif düşene

kadar. Akademik yayın yapan Lambert yayınevi tezimi *print on demand* basmak istiyordu. Abstarct'i İnternetten bulmuşlardı ve bana ful metni soruyorlardı.

Ben de hemen metni bilgisayarımda aramaya başladım. Ama seneler boyunca bir sürü lap top ve hard disk değiştirmiştim. Kimi bozulmuş, kimisi çalınmış ve doğal olarak içlerindeki bilgiler yok olmuştu. E posta adreslerime baktım. Onlar da seneler içinde –eskimeye yüz tutmuş barajlar gibi- dolup işlevlerini yitirmişlerdi. Kimisinin şifresini unutmuştum, örneğin Yahoo, kimi e-posta adresim örneğin rocketmail) kapanmış veya isim değiştirmişti. Hotmail'in de modası geçmişti, kimse kullanmıyordu. Kalmıştık gmail ile baş başa…

O zaman fark ettim ki dijital dünyanın da bir hayat döngüsü var. Yine uçsuz bucaksız İnternet coğrafyasının sınırları mevcut, buradaki okyanus karalar var ve denizlerin ortasında yer alan adalar bazen su üzerine çıktıkları gibi bazen de Atlantisin başına geldiği gibi suların arasına gömülebiliyorlar.

Orijinal metne kendi dosyalarım arasında ulaşamayınca, okulum New School'a yazarak onlardaki metni sordum. Türkiye'deki Üniversitelerde tez yazdığınız bölüm, yazdığınız metni kütüphanesinde saklamak zorundaydı. Şanssızlık bu ya, okulum, New School Media Studies böyle bir arşiv tutmuyormuş!

Dijital Devrim ile ilgili yazdığım kitap, dijital dünyanın cilveleri sebebiyle ortadan kaybolmuştu. Sihirli uçan sandık masalında sandığın havai fişeklerle bir gece apansızın yanması gibi… Kutlamanın kabusa dönüşmesi…

Dijital Devrim ile ilgili yazdığım kitabımın kurtuluşunu ondan analog bir kopya çıkartmama ve o kopyayı da sevgili anneme hediye etmeme borçluyum. Annem fazla tutumlu ve bizim tabirimizle çürükçü bir insandır. Savaş görmüştür. Her şeyi saklar. Gerçek bir arşivci veya müzecidir aslında… Kariyerimdeki birçok şeyi ona borçlu olduğum gibi bu kitabı da ona borçluyum.

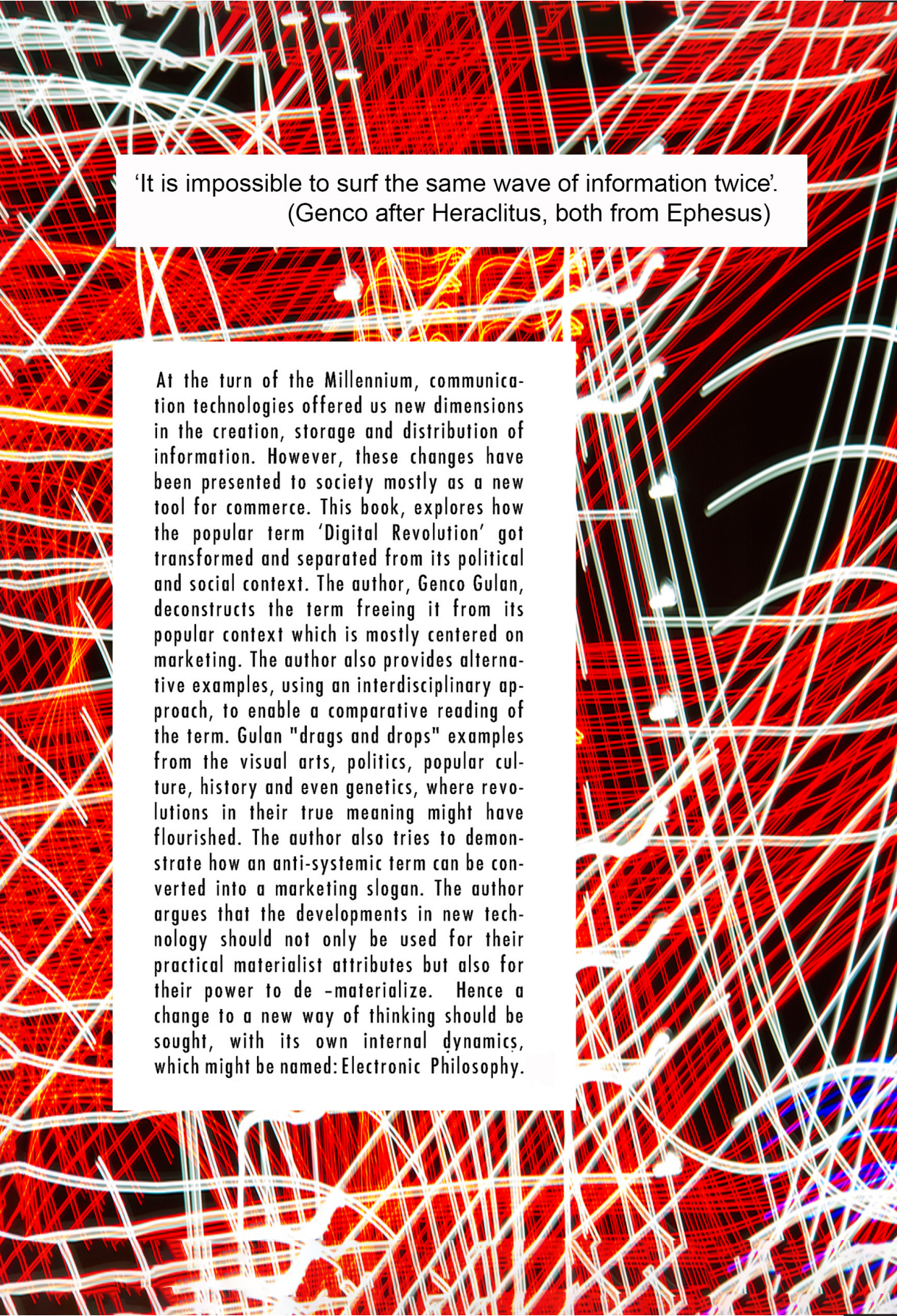
İşin en ironik kısmı şu: Maddesizleşmeyi savunduğum metin, fiziksel bir maddeye dönüşmeseymiş bu günlere gelmeyecekmiş! Büyük bir ünlem işareti! Ve belki de iyi olurmuş!

Kitabın arka kapağını düzenlediğim şu günlerde fark ettim ki, kitabın sonuç bölümünde de önemli bir vurgu eksikliği varmış. Sonuçta tabi ki tartışmayı neticelendirirken yeni bir dijital teorinin gerekliliğinden bahsederek bitirmeye çalışıyorum. Ama teori her zaman kendi başına yeterli olmayabiliyor.

Yeni teknolojilerin en önemli eksikliği toplumu tam olarak dönüştürememeleri değil. Toplum dönüşemiyor çünkü yeni teknoloji eski felsefi alt yapılarla idare etmeye çalışıyor. Yeni bir felsefi yapı otomatik olarak aletlerin kullanma kılavuzlarında bizlere gelmiyor ve/ veya gelenler yaygınlaşmıyor. Akıllı cihaz kullanımı artıyor ama bu insanların ve toplumun akıllanması anlamına gelmiyor.

Yapay zeka artık kendi kendine öğrenmeye de başladığına göre, belki de yeni elektronik felsefenin ana hatlarını robotlara yazdırmak lazım? Neden olmasın?

İstinye Beşiktaş Vapuru, 2021



‘It is impossible to surf the same wave of information twice’.
(Genco after Heraclitus, both from Ephesus)

At the turn of the Millennium, communication technologies offered us new dimensions in the creation, storage and distribution of information. However, these changes have been presented to society mostly as a new tool for commerce. This book, explores how the popular term ‘Digital Revolution’ got transformed and separated from its political and social context. The author, Genco Gulan, deconstructs the term freeing it from its popular context which is mostly centered on marketing. The author also provides alternative examples, using an interdisciplinary approach, to enable a comparative reading of the term. Gulan "drags and drops" examples from the visual arts, politics, popular culture, history and even genetics, where revolutions in their true meaning might have flourished. The author also tries to demonstrate how an anti-systemic term can be converted into a marketing slogan. The author argues that the developments in new technology should not only be used for their practical materialist attributes but also for their power to de -materialize. Hence a change to a new way of thinking should be sought, with its own internal dynamics, which might be named: Electronic Philosophy.